

MIT Designed Dipoles In Experimental Orbit

The Air Force launched its controversial project WEST FORD October 21 at 9:53 A.M. Boston time. The Air Force hopes to scatter 350,000,000 copper wires in a belt around the earth to test the possibility of using such a band for communication purposes.

The basic concept of orbital scatter on which this project depends was first proposed three years ago by Mr. Walter E. Morrow of MIT's Lincoln Laboratory in collaboration with Mr. Harold Meyer, formerly of Thompson Ramo Woolridge, Inc.

MIT Plans Project

Technical planning and support of the project is being carried on at MIT's Lincoln Laboratory, Lexington, Mass., for the Air Force Systems Command.

Lincoln Laboratory has built two transmitting and receiving stations three thousand miles apart—at Parks AFB near San Francisco and on Millstone Hill in Westford, Mass. These stations will be equipped to make radar measurements of the band and to transmit and receive communications signals. They will attempt simultaneous two-way transmissions.

Earth Girdled By Copper

The copper dipoles which form this belt are about seven-

tenths of an inch long and one-thousandth of an inch thick. The 350,000,000 dipoles will be scattered quite widely in a belt five miles wide and twenty-five miles thick that will eventually surround the earth. This belt is expected to grow to completion in about thirty days and will orbit the earth at a height of 2,100 miles.

If the WEST FORD experiment is successful, scientists theorize that two such belts, one in orbit about the poles and one in orbit about the equator, could be used to provide communication between any two points on earth.

This system would be very reliable, since all the active radio equipment is located on the ground and is therefore easily accessible for maintenance. The belts themselves are quite invulnerable to physical damage during their useful lifetime. They would have to be replaced.

(Please turn to page 11)

Astrodynamic Pioneer Dr. Samuel Herrick Is Hunsaker Professor

Dr. Samuel Herrick, one of the world's leading space scientists, has been appointed Jerome Clarke Hunsaker Visiting Professor of Aeronautical Engineering for the academic year 1961-62.

Dr. Herrick will hold the Hunsaker professorship while on leave of absence from his position as Professor of Astronomy at the University of California at Los Angeles.

Dr. Herrick has been a pioneer in astrodynamics, a field in which techniques used in studying the influence of gravity on celestial bodies are applied to engineering problems associated with man-made missiles, satellites and space vehicles. Dr. Herrick gave astrodynamics its name.

Dr. Herrick founded the Institute of Navigation and has served as its executive secretary and president. He is a member of the Board of Directors of the American Rocket Society.

During the Fall semester, Dr. Herrick will teach a graduate course in "Advanced Astrodynamics and Rocket Navigation" and present numerous seminar lectures on astrodynamics.

Chamberlain To Visit Middle East



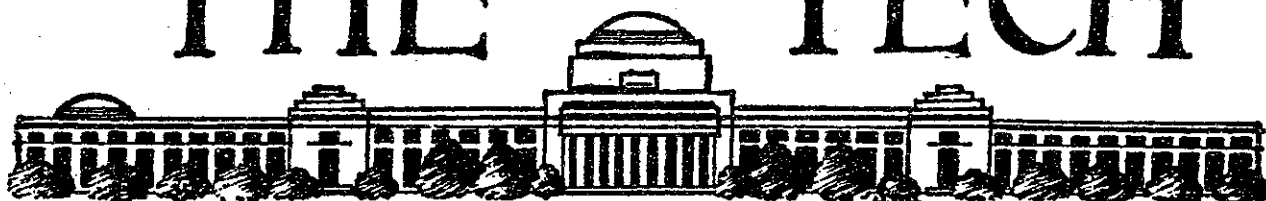
Eugene R. Chamberlain

Eugene R. Chamberlain, associate advisor of foreign students at MIT, will go to the Middle East this fall on a six-week trip made possible by a grant from the "American Friends in the Middle East, Inc."

The objectives of the trip will be to learn first-hand how school officials interpret U. S. university admissions procedures, to clarify where necessary the extremely complex range of U. S. admissions practices, to study Middle Eastern university admissions programs, and to investigate operations of agencies engaged in international educational exchanges.

Mr. Chamberlain will travel with Professor Gordon Erickson of NYU to universities in Kuwait, Iraq, Lebanon, Syria, Egypt, and Turkey.

THE TECH



Established At MIT In 1881

Vol. 81, No. 20

Cambridge, Mass., Wednesday, October 25, 1961

5 Cents

JP Table Reservation Drawing Is Planned For Tuesday 5 P.M.

Frank Levy '62 has announced that students desiring table reservations for JP weekend should make certain that they have a representative present at the drawing for tables. The drawing will be at 5 p.m. Oct. 31 in 10-275.

Individuals representing other students at the drawing must bring all tickets which are to be applied to their tables. Regardless of his success in the draw, no one will be assigned more seats than the number of tickets he presents at the drawing.

WGBH Staggered

Structure Is Station's Major Loss \$1.5 Needed For New Building

The fire that struck the offices of WGBH Oct. 14 brought staggering losses to the station.

Although the equipment was insured and negotiations for payment are now in progress, the insurance will not cover the replacement cost of much underinsured equipment, nor the large installation costs of any of the equipment.

The major loss to WGBH was the building, in which the station had invested more than

\$250,000 to adapt the structure to its specialized purposes.

Faced with the necessity of finding new quarters within a year, station officials estimate the minimum cost of a new building is between \$1.2 million and \$1.5 million. About \$100,000 of this has been raised.

Current operations are very costly to the station. Operating from four locations in the city, WGBH must pay video line charges from each location.

Only the unusual cooperation of commercial stations is helping WGBH to broadcast "21 Inch Classroom" which is played from video tape.

The brightest parts of the WGBH outlook according to a station spokesman are the willingness of other stations to aid WGBH, and that the video tape mobile unit was not damaged, although much equipment being readied for the unit was destroyed.

Bushkin Chosen Fresh Head: Plan For JP Weekend

Freshman council met on Monday, Oct. 16, and elected officers to serve until spring elections. Arthur Bushkin, AEP, was elected president on the third ballot, Mark Stein, Burton, vice-president on the second ballot, and Warren Anderson, SAE, secretary-treasurer, on the first ballot.

The newly-elected president called a meeting for Wednesday, October 18 to organize Field Day activities. Committees were named and their functions described.

Chariot Race, Carl King, Ext. 3782 and section leaders from sections 21, 18, 23, and 6; Building, Barry Wessler, Ext. 3205 and sections 16, 19, and 34; Supplies, Marshall Fisher, Ext. 3161 and sections 30, 14, and 12; Race, Pradip Burman, Ext. 3285 and sections 3 and 24.

Also, Tug of War, and Event X, Bruce Seaton, Ext. 3264 and sections 11, 28, and 29; Glove Fight, Mark Hanson, Ext. at CI 7-7650 and sections 35, 17, 20, and 8; Publicity, Ed Yourdon, Ext. 3273 and sections 25, 22, and 7.

Also, Questionnaire Committee, Jack Hafstrom, Ext. 3216 and sections 36, 31, and 10; Quizbook Committee, Billy Cohen, AL 4-9309 and sections 1 and 5.

An emphasis was placed on the nature of pranks to be pulled and the importance of keeping them under control.

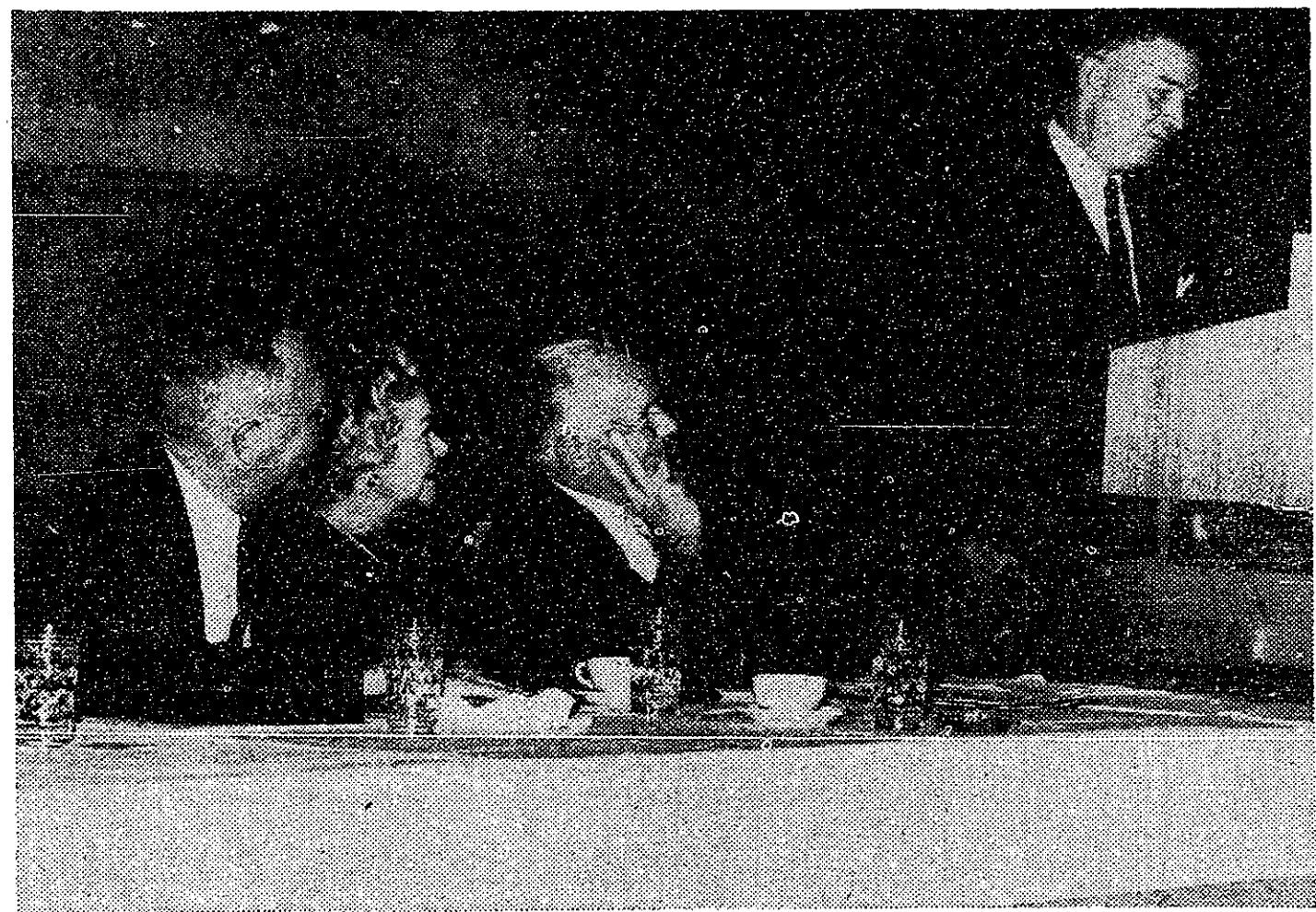
A meeting was scheduled for Sunday, October 22.

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Alumni In Over 40 Cities Hear 'Voices'



— Photo by Allen Rosenberg '63

Earl Stevenson '19, Mrs. Arnold, and President Julius Stratton listen while Mr. Dwight C. Arnold '27 addresses the audience during Alumni Night, October 19. Mr. Arnold was toastmaster for the evening.

"The mission of a university is to teach and to contribute a share to the enlargement of knowledge and understanding.

"The standard of excellence that MIT has set for the fulfillment of that mission, the energy and imagination that the faculty is applying to its task, the way in which we seek to interweave teaching and research into the single fabric of education—these are the facts that today are giving to the In-

stitute its unique character and quality."

These were the words of President Stratton at the "Voices of Technology" program, Oct. 19 in Walker Memorial.

Alumni of 40 Cities

Alumni from more than 40 cities across the nation were linked by closed circuit telephone as host Philip H. Peters '37 presented voices from MIT's past. Following an invocation by Mrs. Karl Taylor Compton, taped excerpts were played from speeches by President Kennedy, Prime Minister Macmillan and Sir Winston Churchill.

Vannevar Bush, Samuel C. Prescott, James R. Killian, Karl Taylor Compton, Alfred P. Sloan and others presented thoughts from their close associations with MIT past and present. Professor Hans Mueller, selected to represent MIT's tradition of teachers, was among the members of the faculty who spoke.

"Tech Is Hell": DAVO

DAVO, Dynamic Analog of the Vocal Tract, delivered the following summary of his experiences at MIT: "This is DAVO at MIT. Tech is hell."

Other technological side-lights were a digital computer programmed to play music with the automatic typewriter doing the percussion, and transmission of the voice of John J. Wil-

son '29, Chairman of the Second Century Fund, from California via the moon.

The advice of Dudley Clapp '10 given at last year's commencement luncheon was repeated:

"Now your president has asked me to give you advice":

Half a century's worth
In a neat little slice;
Though I fear we old fogies
Don't cut any ice.
Our fond reminiscences
Bore so.

Just allow me to warn you—
Your studies aren't through.
What you've learned is not all,
And won't always be true.

Keep alert and receptive
To new points of view.
For life is like Tech—
Only more so!

Immediate Plans Outlined

President Stratton presented an outline for construction plans. North campus will enjoy a Center for Materials Science and Engineering to cost about \$6 million, a Center for Communications Sciences, and a Center for Aeronautics and Astronautics. In East campus will be a Center for Life Sciences, doubling the space available for Food Science and Technology; construction on the Earth Sciences building will soon begin, and the Cenco building will house psychology laboratories.

Construction of a women's dormitory will begin early next year in the West campus.

The Appalachian Mountain Club presents
HANS GMOSE of Banff, Alberta
with his 1961 Ski-Adventure Film

"DEEP POWDER AND STEEP ROCK"

filmed in the deep, powder-snow,
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John Hancock Hall, Nov. 1 & 2, 8:30 p.m.

Unreserved tickets \$1.65, tax inc.

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AMC Ski Movie, 5 Joy St., Boston 8



THE DATING SEASON

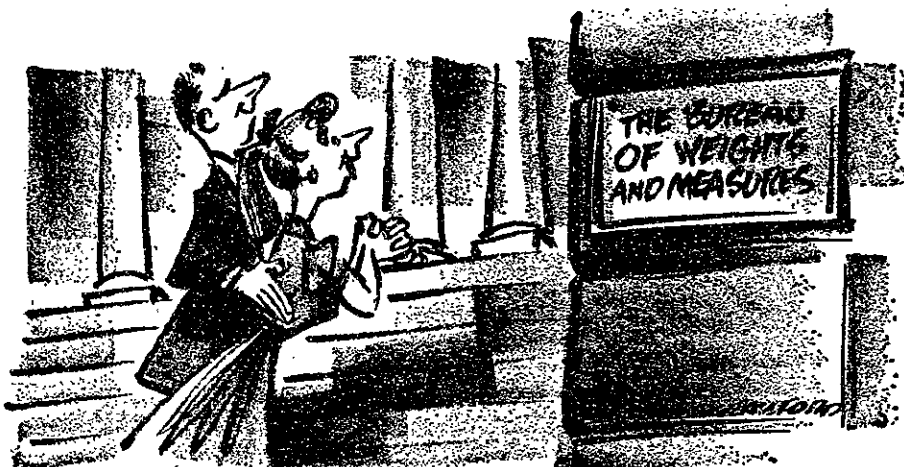
I have recently returned from a tour of 950,000 American colleges where I made a survey of undergraduate dating customs and sold mechanical dogs, and I have tabulated my findings and I am now prepared to tell you the simple secret of successful dating.

The simple secret is simply this: a date is successful when the man knows how to treat the girl.

And how does a girl like to be treated? If you want to know, read and remember these four cardinal rules of dating:

1. A girl likes to be treated with respect.

When you call for your girl, do not drive up in front of the sorority house and yell, "Hey, fat lady!" Get out of your car. Walk respectfully to the door. Knock respectfully. When your girl comes out, tug your forelock and say respectfully, "Good evening, your honor." Then offer her a Marlboro, for what greater respect can you show your girl than to offer Marlboro with its fine flavor and exclusive selectrate filter? It will indicate immediately that you respect her taste, respect her discernment, respect her intelligence. So, good buddies, before going out on a date, always remember to buy some Marlboros, available in soft pack or flip-top box in all 50 of the United States and also Cleveland.



A girl likes to be taken to nice places

2. A girl likes a good listener.

Do not monopolize the conversation. Let her talk while you listen attentively. Make sure, however, that she is not herself a good listener. I recollect a date I had once with a coed named Greensleeves Sigafos, a lovely girl, but unfortunately a listener, not a talker. I too was a listener so we just sat all night long, each with his hand cupped over his ear, straining to catch a word, not talking hour after hour until finally a policeman came by and arrested us both for vagrancy. I did a year and a day. She got by with a suspended sentence because she was the sole support of her aged housemother.

3. A girl likes to be taken to nice places.

By "nice" places I do not mean expensive places. A girl does not demand luxury. All she asks is a place that is pleasant and gracious. The Tomb of the Unknown Soldier, for example. Or Mount Rushmore. Or the Taj Mahal. Or the Bureau of Weights and Measures. Find places like these to take your girl. In no circumstances must you take her to an oil-cracking plant.

4. A girl likes a man to be well-informed.

Come prepared with a few interesting facts that you can drop casually into the conversation. Like this: "Did you know, Snookiepuss, that when cattle, sheep, camels, goats, antelopes, and other members of the cud-chewing family get up, they always get up hind legs first?" Or this: "Are you aware, Hotlips, that corn grows faster at night?" Or this: "By the way, Loverhead, Oslo did not become the capital of Norway till July 11, 1924."

If you can slip enough of these nuggets into the conversation before dinner, your date will grow too torpid to eat. Some men save up to a half million dollars a year this way.

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To the list of things girls like, add the king-size, unfiltered Philip Morris Commander. Girls, men—in fact everybody with a taste bud in his head—likes mild, natural Commander, co-sponsors with Marlboro of this column.

College World

Prohibition Smashes Fraternities; UConn Students Retain Lawyers

"College World" on September 27 reported that University of Connecticut's **Daily Campus** was running into its share of troubles. The paper was made independent of the Student Senate and responsible to an administration-appointed advisory council. The paper's editors said that they believed this censorship-threatening move was made because the paper in the past had often been critical of the University and of its administration.

This appears to have been only the start of troubles on the UConn campus. Early this month 2500 male students, later joined by hundreds of coeds, demonstrated in protest of new University policies. The new policies include financial control over all activities with an annual budget of over \$100, prohibition of on-campus fraternity parties where liquor would be served, and extension of "advisory councils" to cover not only the newspaper, but also the student radio station and the yearbook.

"Hit the Road, Jack"

Students at the UConn-Yale football game carried huge placards with the slogans: "UC-Slave State", "Rights, Not Writs", and "The Big Three—Khrushchev, Castro, and Dunlop". Dunlop is Assistant Dean of Men, John P. Dunlop, who was responsible for issuing the new student control rulings. Afterwards, hundreds of students marched on Dunlop's home. From loudspeakers in the windows of dorms and fraternity houses across the campus blared Ray Charles' "Hit the Road, Jack."

The **Daily Campus** of October 2 editorially condoned the demonstrations and contained several "Letters to the Editor" from faculty members expressing sympathy for the students' cause. The **Daily Campus** of October 6 was headlined: "Students United; Fight for Rights." Under the headline was this story:

"This issue of the **Daily Campus** is being published to dramatically illustrate the seriousness of the problems confronting the student body at this University.

"The issues are: first, Students have been denied the right to allocate their funds, and second, The Associated Student Government has not been recognized as the representative body for the students at the University of Connecticut."

Eight White Pages

The remainder of the eight page paper was left blank (except for column rules) as a gesture of protest. There were also several other actions of protest. The UConn Interfraternity Conference voted to boycott the annual Homecoming Weekend. This includes a boycott of

the week-end's football game, the cancellation of all fraternity-sponsored post-game activities, and the total boycott of a Dave Brubeck jazz concert, scheduled for the weekend. The UConn Teacher Federation has thrown its support behind the protests. In addition, the students have hired a Hartford law firm as legal counsel for the student body.

The Virginia Tech (VPI) has announced that with an engineering enrollment of about 3700, VPI now has the seventh largest engineering school in the United States. Among the courses given at VPI are mechanical, marine, and electrical engineering, and naval architecture.

No More Course XIII?

About naval architecture, the Virginia Tech reports, "A lack of students interested in enrollment in the naval architecture program has found the discontinuance of the curriculum at MIT." A check with the Course XIII office reveals that this is not true, and a letter may be sent to the editor of The Virginia Tech to inform him of this.

Discrimination at Rad - - -

Did you know that Tech students are not allowed to take Rad - - - freshmen to dances on the Tech campus for the first quarter of the school year—even if the dance is a big formal? What makes the situation worse is that Rad - - - girls are allowed to go to dances at any other school in the area. This is out-and-out discrimination.

Of course "Tech" is not MIT. It is Virginia PolyTECH. And Rad - - - is not Radcliffe; it is Radford, an extension of VPI. What really hurts is that 'Fordies are allowed to go to dances held by VPI's biggest rival schools, VMI and UVA. The Virginia Tech has called on the administration of Radford to justify its position or modify its policies so the VPI men have the same privileges with the Radford frosh that VMI men have.

Look Ma, No Sting!

An amazing new scientific discovery can now bring you direct relief. Never again will your eyes have to feel the stinging effect of chlorine—not if you go to Brooklyn Polytech. Chlorine will no longer be put into the swimming pools. It has been replaced by "HIO-dine," a mixture of potassium iodide with an organic reducing agent. "HIO-dine" has been tested in the pool over the summer, and is said to have eliminated the stinging side-effects of chlorine. Also it is supposed to have lasting germicidal action. The chemical is a variation of the non-stinging iodine now being sold.

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PERSONAL ON CAMPUS INTERVIEWS Monday & Tuesday, October 30 & 31

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Calendar of Events

*Open to the public.

WEDNESDAY, OCT. 25

Operations Research Center.*
Seminar: "Managerial Decision Making — A New Theory." Professor E. H. Bowman, School of Industrial Management, M.I.T.
Room 1-146, 2:00 p.m.

Department of Nuclear Engineering.*
Seminar lecture: "A Summary of the Experimental and Numerical Physics Performed in Support of the Design of the High-Temperature Gas-Cooled Reactor." Dr. N. F. Wikner, Research Staff Member, General Atomic.
Building NW-12, 138 Albany St., 4:00 p.m.

Department of Biology.*
Seminar: "Gene-Protein Relationships in Human Hemoglobin." Dr. Corrado Baglioni. Tea in Room 16-711 at 4:00 p.m.

Technology Catholic Club.*
Meeting.
Miller Room, 5:00 p.m.

Protestant Christian Association.*
Study Group.
317 Memorial Drive, 5:00 p.m.

The Japan Society of Boston.*
Japanese film series: "Arakure" (Untamed). The first of a series of four modern Japanese films with English subtitles.
Room 10-250, 7:00 & 9:15 p.m.

Hillel Society.*
Israeli Dancing.
Walker Memorial Room 201, 8:30 p.m.

THURSDAY, OCT. 26

Noonday Organ Recital.*
Winthrop Smith, M.I.T. Graduate Student. Admission free.
Kresge Auditorium, 12:15 p.m.

Department of Nuclear Engineering.
Seminar: "Fast Fission Measurements in the M.I.T. D2O Lattice." J. R. Wolberg. "Non-Destructive Determination of Properties of Spent Fuel by Gamma Ray Spectroscopy." M. D. Cohan. "Practical Plasma Generation and Feasible Plasma Acceleration." L. Lidksy.
Building NW-12, 138 Albany St., 3:00 p.m.

Department of Physics.*
Colloquium: "Optical Masers." Dr. Charles H. Townes, Provost of M.I.T. Tea in the John Picker Koller Room (26-414) at 3:30 p.m.

Seminar Sponsored By The Protestant Ministry.*
Contemporary drama seminar. Mr. Bloy.
317 Memorial Drive, 5:00 p.m.

Water Polo Club.*
Meeting.
Alumni Pool, 6:30 p.m.

Seminar Sponsored By The Protestant Ministry.*
Seminar on New Patterns in Family Life. Mr. Holtzapfel.
317 Memorial Drive, 7:30 p.m.

FRIDAY, OCT. 27

Department of Chemical Engineering, 10.991 Seminar.
"Chemical Reactions at Tempera-

tures Above 2500° K." Jean Blanchet.
Room 4-160 at 3:00 p.m.

"Dynamic Behavior of Coupled Unit Operations." T. J. Boyle.
Room 12-102 at 4:00 p.m.

Department of Mechanical Engineering.
Seminar: "Irreversible Thermodynamics of Non-Linear Systems." Dr. James C. M. Li, United States Steel Corp. Coffee in the Miller Room at 3:00 p.m.

Room 3-270, 3:30 p.m.

Technology Catholic Club.*
Philosophy Lecture Series: "Philosophy in an Age of Science." Father William Wallace, O.P.
Room 3-133, 5:00 p.m.

Lecture Series Committee.
Classic film series: "Ordet" (Danish, 1954). Admission by subscription ticket only.
Room 10-250, 6:30 & 9:00 p.m.

SATURDAY, OCT. 28

American Mathematical Society.*
Eastern Sectional Meeting. Registration, Building 2, first floor, 9:00 a.m.-3:30 p.m.

General Session: "Some Results and Problems in Differential Topology." Professor Michael Kervaire, New York University.
Room 26-100, 2:00 p.m.

Lecture Series Committee.*
Entertainment film series: "Middle of the Night."
Kresge Auditorium, 5:15, 7:30 & 9:45 p.m.

SUNDAY, OCT. 29

Protestant Christian Association.
Breakfast for Protestant Students. West Dining Room, Graduate House, 10:00 a.m.

MONDAY, OCT. 30

Applied Mathematics and Mechanics Colloquium.*
"The Theory of Long Antennas." Professor T. T. Wu, Harvard University. Tea in Room 2-290 at 3:30 p.m.

Room 2-390, 4:00 p.m.

Seminar Sponsored By The Protestant Ministry.*
Inquirers Seminar. Mr. Ihde. Spofford Room, 1-236, 5:00 p.m.

Choral Society.
Rehearsal.
Kresge Auditorium, 7:30 p.m.

TUESDAY, OCT. 31

Computation Center.*
Seminar: "Musical Sounds from Digital Computers." Dr. Max Matthews.
Room 10-275, 3:00 p.m.

Department of Aeronautics and Astronautics.*
Seminar: "Problems in Space Communications Re-Entry." Professor F. J. Tischer, Department of Electrical Engineering, Ohio State University. Coffee in the duPont Room (33-307) at 3:30 p.m.

Room 35-255, 4:00 p.m.

Department of Metallurgy.*
Colloquium: "Microtopology of Oxidation Processes as a New Tool for Studying Metal Structure." Dr. E. A. Gulbransen, Westinghouse Research Laboratories.

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Placement Interviews

Course numbers eligible listed in parentheses.

OCTOBER 25

Digital Equipment (6); General Radio (6, 8); B. F. Goodrich (2, 8, 10, 18); Sprague Electric (2, 5, 6, 8, 10); Sperry Rand (8, 10, 12, 18); Boeing (1, 2, 6, 8, 16, 18); General Motors (2, 3, 5, 6, 8, 10, 16, 22); Central Intelligence Agency (2, 3, 6, 8, 10, 12, 14, 15, 16, 18, 19, 21, 22).

OCTOBER 26

Monsanto Chemical (2, 5, 10); American Cyanamid (5, 7, 8, 10); Battelle Memorial Institute (2, 3, 5, 6, 8, 10, 12, 14, 15, 16, 18, 19, 21, 22).

Water Polo Club.*

Meeting.
Alumni Pool, 6:30 p.m.

M.I.T. Faculty Pistol and Rifle Club.*
Greater Boston Pistol League match, M.I.T. Team No. 1 and M.I.T. Team No. 2.
Rifle Range, 8:00 p.m.

WEDNESDAY, NOV. 1

Operations Research Center.*
Seminar: "Dynamic Inventory Systems." Dr. Eliezer Naddor, Johns
(Please turn to page 6)

5, 6, 8, 10); Consolidated Edison of New York (1, 2, 6, 10); North American Aviation: Atomics International (2, 3, 5, 6, 8, 10, 18, 22), Autonetics Division (2, 3, 5, 6, 8, 18), Columbus Division (2, 6, 8, 16, 18), Rocketdyne (1, 2, 3, 5, 6, 8, 10, 16, 18), Los Angeles Division Space and Information Systems Division (2, 6, 8, 16).

OCTOBER 27

American Cyanamid (5, 7, 8, 10); North American Aviation (See listing under October 26); E. I. duPont de Nemours (2, 6); Ohio Oil (5, 10); Timken Roller Bearing (2, 3, 15); Youngston Sheet and Tube (2, 3, 10, 15, 18).

OCTOBER 30

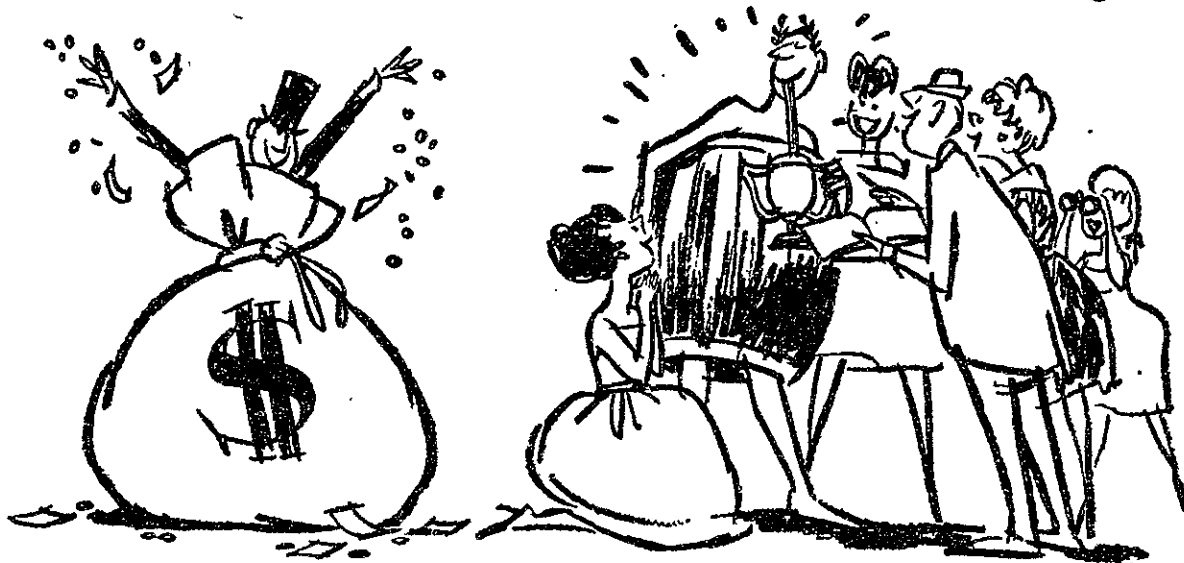
Douglas Aircraft (2, 6, 8, 10, 18); Humble Oil (2, 6, 10); Lord Manufacturing (2, 5, 8); Standard Oil (2, 6, 10, 18).

OCTOBER 31

Convair (2, 3, 6, 8, 16, 18); Douglas Aircraft (2, 6, 8, 10, 18); Falk (2, 6, 15); General Electric (2, 3, 5, 6, 8, 10, 13, 15, 18); Standard Oil (2, 6, 10, 18); Texaco (1, 2, 5, 6, 8, 10, 18).

Check your opinions against L&M's Campus Opinion Poll = 8

What's better—fame or fortune?

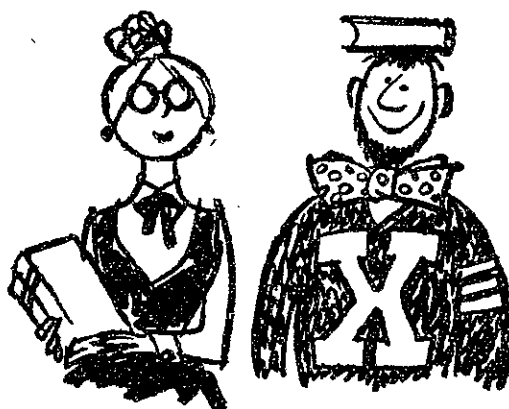


☐ Would rather have \$50,000-\$100,000 yearly salary—and obscurity

☐ Would rather have world recognition—and small financial rewards

Are students conservative or liberal?

Do students prefer filter or non-filter cigarettes?



☐ Conservative
☐ Middle of the road
☐ Liberal

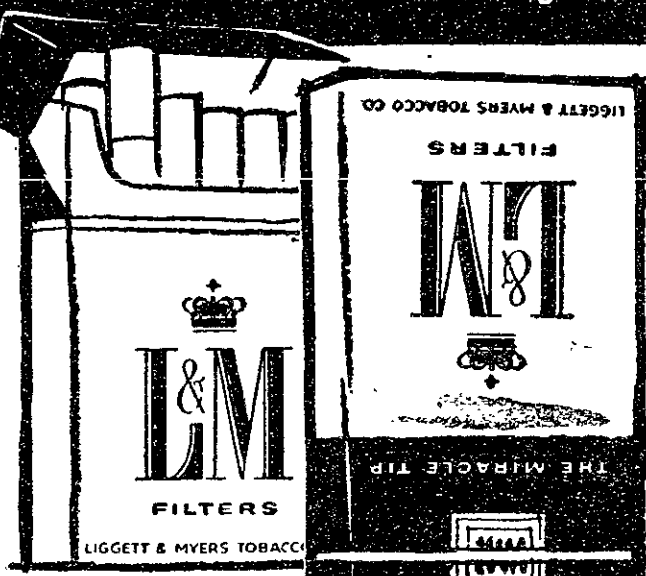


☐ Filters
☐ Non-filters

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Category	Percentage
Conservative	28%
Middle of the road	29%
Liberal	43%
Filters	72%
Non-filters	28%

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The Tech

Vol. LXXXI No. 20 Oct. 25, 1961

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Candidates: Fred P. Anderson '65, Alan Schwartz '63,
Arthur R. Sindoris '65

Features Staff: Thomas F. Arnold '64, Don Goldstein '65,
David Trevvett '65

Deadlines: Advertising, noon Thursday. Entertainment,
Features, Letters to the Editor, Photography, Sports, noon
Sunday. News, 7 p.m. Monday.

Unsigned editorials appearing in THE TECH constitute
the opinion of the newspaper's Board of Directors, and
not that of MIT. The newspaper welcomes letters from
its readers. Space permitting, such letters will be printed
in whole or in part, if deemed by the editor to be of
sufficient interest or benefit to the community. Brevity in-
creases the chance of publication. Anonymous letters will
not be printed. Names will be withheld upon request.

Charter Flights

The MIT Charter Flights are up for bidding. The process of running the four flights to Europe every summer for MIT people is a large and profitable business. This business once more raises the current conflict over who should be permitted to make money on services rendered to the students, staff and faculty at MIT.

Total possible profits on the four flights is two thousand dollars, or five hundred dollars for each eighty person trip. There is no guarantee that the person or group running the flights is going to make any money; in fact, there is some capital risk. The Office of the Dean of Student Affairs is currently trying to choose some person or group to run the flights this year under the "sponsorship" of MIT. What this means is that this authorized person will be permitted to use the Institute mail system, and a request will be made to the Institute Committee Secretariat to restrict bulletin board use to that one person.

Last year, after the Dean had picked a student, the Secretariat granted bulletin board use to another student as well, in the interests of free-enterprise. This second student bought out the first, and in the end there was one set of flights at a higher price than either group had originally intended.

This is an area in which too much competition, or any competition at all, can be deleterious. If no group gets sufficient passengers, there could be no flights at all. There is also the question, again, of whether or not this is a service which should be provided at minimum rates to the MIT community; the TCA is looking into the matter. If the charter flights are left in the realm of free-enterprise, and if the Dean's Office is going to grant official recognition to one person in the interests of reducing the cut-throat competition, what should be the basis of the recognition? Need of profits for a worthwhile cause? Or should it be on the basis of demonstrated ability to get the job done? Or on the basis of a minimum bid per person per trip? Whoever does receive recognition is in some sense being handed two thousand dollars.

This is one more indication for the need of a policy to be formulated concerning campus enterprises. We urge the Institute Committee to begin an immediate investigation of the entire problem.

Commerce

The fire at the WGBH studios across from Building Seven has on top of its obvious consequences for the educational television station, also brought into focus several problems directly involving MIT itself. In the first place, the site of the fire was a building now occupying the space proposed for the much-discussed and long-delayed student union. In the second place, the group of stores occupying the building represented practically the only commercial facilities on or near the campus, besides the Coop.

The fire has taken out of business, at least temporarily, a large barber shop, and a not to be too terribly lamented cafeteria and drug store. Inadequate as these stores were, they represented at least some access to the needs of everyday

existence. For a university in the midst of a metropolitan area of over a million people, MIT is rather badly isolated. The surrounding area is a rather depressing and uninviting place to live.

There is not much MIT can do about the heavily industrial neighborhood, but it can try to make its own campus a more complete unit. It is a fact that there is not on campus a decent restaurant that would make week-end meals a little easier to obtain. With the not-too-distant closing of Howard Johnson and Smith House, those facilities currently in existence will completely vanish. Everyone speaks of the MIT community, but very little of it exists.

The prospective student union has often been attached to commercial activity by plans allocating space for stores right in the proposed building. There is as yet no money available for the union, but the Institute architect is in the process of drawing up yet another proposal. We think careful consideration should be given to the question of whether commercial activity might be more useful in a large building by itself where businesses could attain a useful size. Whatever decision is made with regard to long range plans for the union, MIT ought to encourage substantial private businesses to operate on campus to provide a few more of the amenities of civilization.

National Review II

The *National Review*, a "Journal of Fact and Opinion," as it calls itself, each week manages to put forth a conservative philosophy in a variety of ways. It has taken the format of the liberal weeklies, mainly the *New Republic*, and put them to its own uses. Where the *New Republic* begins with a series of short editorials, the *National Review* does also. Where the *New Republic* prints a cartoon, so does Mr. William F. Buckley's magazine. There is the same attempt at long, closely-reasoned articles, and of witty columnists. Where the former magazine has book reviews, so does the *National Review*. One thing that seems to be missing however, is the *Review's* lack of discourse on current theatre, films, art, and other cultural pursuits. The magazine contains an occasional denunciation of modern art, but rarely ventures any further into aesthetic considerations. The NR seems to have placed itself firmly out of the picture.

What the *National Review* does specialize in is the wisecrack, e.g. the following from a recent issue: "Quote Adlai Stevenson: 'We've made some progress with respect to the problem of the Secretary-General.' Unavailable at press time: the Secretary General." This is the entirety of the lead item in the issue. Or this, also in its entirety: "In Washington, D. C., at a party for the Ghanaian National Founder's Day, Soapy Williams adorned himself with a black bow tie with a white giraffe on one side and a white rhinoceros on the other. His hosts were kind to all three dumb animals." Doubtless this sort of thing is very pleasing to the magazine's readers, but it makes one wonder at the level of their political thinking, if not at the level of their intelligence.

The editors seem to have the idea, and judging from the Letters to the Editor, the readers agree, that calling a public figure by his first name is the ultimate in devastating criticism. The standards are "Adlai," "Eleanor," "Rocky," "Jack," and of course, "Harry." Either the editors are aware that their readers respond in a glandular sort of way to this sort of writing, and are doing it intentionally, or else it is due to a fundamental infantilism in the editors themselves.

Besides the wisecracks and the attempted colloquialisms, the NR is full of all kinds of cliches. The death of two conservatives is announced in the pages under the headline, "R.I.P." The headline over a column by James Burnham is "On the Horns of Our Dilemma." They use phrases such as: "... nothing succeeds like success," "... according to their lights, cry heresy or rise to applaud ..." or "we feature, God bless us, a new columnist ..." or a phrase like, "One thing the Liberal mind cannot stomach ..." And so forth and so on. Even when they do have something to say, the NR writers destroy the effect by gumming up their prose with worn out, hackneyed phrases.

What is it they are trying to say? They don't like Dag Hammarskjold, Nelson Rockefeller, John F. Kennedy, the United Nations, the Americans for Democratic Action, John Dewey, integrationists, Social Security, income taxes, Communists, Earl Warren, Labor unions, and of course, anything that might fall under the title of "Liberal." They do like Barry Goldwater, General Walker, Joseph McCarthy, atom bomb tests, Thomas Dodd, and apparently, William McKinley.

(To be continued)

Letters:

To the Editor:

The defense of America today includes not only a safeguarding of her material wealth and geographical borders, but also the protection of Americans from possible physical injury, whether this protection is at a distance in the form of anti-missile-missiles, or at home, in the form of fall-out shelters. This is not a strange or new concept, for England, in addition to fighter planes and radar nets, was dotted with bomb shelters during World War II. Today, the flying fragments have been replaced by drifting fall-out, hence the type of shelter necessary for protection has changed.

The concept that is new, however, is that the average American citizen will be treated as a soldier during all-out war in the sense that he will be placed in survival conditions. No longer can he stave off the fear of enemy superiority and attack by conjuring up thoughts of throwing an army together "to fight an occasional war." In the face of great external danger, a realistic appraisal must be made of the adjustments and preparations necessary for adequate safety. No one can lead a relatively normal life in face of great danger, unless he refuses to acknowledge the existence of such danger.

The necessary preparation, in my mind, includes construction of a fall-out shelter if this will increase the probability of survival. The shelter is not a military establishment, hence its rational use will not turn America into an armed camp. Indeed, the present shelters have peacetime uses far removed from neighborhood pillboxes and ammunition dumps.

I was somewhat shocked to discover that the above were my reasons for advocating shelters, whereas one of your reasons was "If it were not for the sheer power of the organizations behind the military ... the situation would not be so alarming." Your considerations are of internal, not external, threats. In addition, after emphasizing the military aspect of the cold war, you only considered that it was being fought on the ideological, political, and economic levels. I think it is evident that it is also being fought on the military level, and

that one possible, although horrible solution is purely military. Thus I agree that it definitely will be a loss to civilization if the use of fall-out shelters ever becomes necessary, but the brute survival conditions which might follow are, as you stated, only a set-back and not an annihilation of civilization. The capacity to survive as human beings includes the capacity to survive in the physical environment, hence before we do concentrate our time, energy, and money on higher needs, let us first assure physical survival. For "what we have now" cannot have meaning without us, but we can exist without it; indeed, civilization can regain "what we now have," but it cannot recreate civilization.

Ernest Rogers '61

To The Editor:

The recent conflagration at WGBH will probably advance the Student Union building two years. This raises an important question: is Activities Council, under the new Constitution (unapproved by InsComm), prepared to design, and allot space in, the Student Union?

Under this Constitution, in effect, "Class A" members have their names changed to "Permanent Members" and "Class B" activities are called "non-Permanent Members". This, in effect, is a miniscule concession. Also miniscule is the fact that Class B activities will have five seats on the new Council. The method of appointing these five, however, is calculated to lead to faction and politics.

To correct this and stop Class A members from dominating others with the generous new powers they have given themselves in the new Constitution, I propose: first, that InsComm veto the new Constitution; second, that all activities be given equal rights by having all seats rotate in a specified manner or by having a type of Senate and House modeled after that of the U. S.; third, that all activities being discriminated against organize to combat the monopoly of power in the hands of the Class A activities.

This will correct a situation in which Class A members would give themselves much space in the Union, while Class B activities would starve for lack of working room.

Edward J. Dudewicz '63

Kibitzer

By Elwyn R. Berlekamp '62

The annual MIT Bridge Club team of four champions won this year by Prof. Whitehead, Prof. Peterson, Mr. Mosher and Mr. MacLaren. The mathematicians finished only a half point ahead of the second place team in a very close 44 board match.

Shown above is board number 19, one of the more interesting hands from the evening session of the tournament. The bidding cannot pass without comment. North could scarcely help raising his partner to game after South came in with a free bid at the 3 level, and then the fun began. The 4♥ contract is unmakeable, for reasons which will become apparent shortly. East, however, had no way of knowing this and made the first sacrifice of the auction by bidding 4♠. Had North-South not bid 4♥, East would have been content to stop at 3♠, but he figured that North-South could make 4♥, and 4♠ could probably not be set more than one trick if doubled. As the cards lay, of course, things can go much worse. An opening ♣ lead from North would set West's 4♠ contract three tricks, or 800 points worth, but South had no idea that such a profit was possible. His opponents had contracted for a vulnerable game and he held a highly distributional hand. He bid 5♦, not

NORTH			
♠ A 2			
♥ A 9 7 6			
♦ 3 2			
♣ 9 7 5 4 3			
WEST		EAST	
♠ K Q 8 7 6	♠ J 10 4 3		
♥ J 5	♥ K 10 8		
♦ 9 6	♦ 10 5		
♣ A K 10 2	♣ Q J 8 6		
SOUTH			
♠ 9 5			
♥ Q 4 3 2			
♦ A K Q J 8 7 4			
♣ —			
East-West vulnerable.			
Bidding:			
South	West	North	East
1♦	1♠	P	2♠
3♥	P	4♥	4♠
5♦	P	5♥	All P
Opening lead: ♠K.			

really expecting to make it but figuring that he could probably hold his losses to a couple of tricks in ♠ and thus go down only one. This would have been a cheap save indeed if East-West had been able to make 4♠. But South's calculations were wrong on another count. North held the ♠A instead of useless ♣ honors that South more or less expected and therefore 5♦ could have been made. North, however, quite justifiably decided that 5♥ was likely to be a better spot (particularly in view of the extra

(Please turn to page 5)

Hobby Shop Sponsors Photo Contest

By Don Goldstein '65

Here's big news for all of MIT's shutterbugs (and potential shutterbugs)! The Hobby Shop is sponsoring "Tech Photo Fair," a school-wide photography contest which starts this week. A grand prize of \$35 will be awarded for the black-and-white or color print selected as best by a panel of three distinguished judges, and smaller cash prizes for the winning entries in each of the three contest divisions.

These three divisions are Black-and-White Scenic (top prize, \$15), Black-and-White Portrait (\$10), and Color (\$5).

It is recommended that all entries be mounted. Also, black-and-white prints should be enlarged to 5 by 7 inches, and color prints to 3 by 5 inches. An entry fee of 50c for the first, and 10c for each additional print in each division will be charged to help supply the prize money and to discourage contestants from entering mere quantity instead of quality.

Three Experienced Judges

Concerning the panel of judges, Hobby Shop freshman Bob McCadden said, "We have three good men to judge, and they're all extremely interested in the success of the contest." One of them is Professor Harold E. Edgerton, famous for his amazing stroboscopic photographs, who has a broad general interest in photography as well. Henry B. "Chick" Kane is director of the Alumni Fund, and has had much experience in wildlife photography. The third judge, Peter R. Scott, was formerly a professional photographer, and is now head of the Library's Microreproduction Lab.

Wide Publicity Arranged

Several years ago the Hobby Shop ran a small photography contest, without prizes, but this

is the Shop's first contest attempt with Institute-wide publicity and cash prizes. McCadden is quite optimistic about the contest, although he is not sure how much interest there will be in it. "I think we'll get quite a few entries from the Shop itself—many of the members seemed interested," he remarked. In addition, "Tech Photo Fair" has been planned for an optimal time of the school year, when not many other activities are going on around the Institute to distract potential photo contestants.

Since publicity is important in the success or failure of any contest, the Hobby Shop has arranged many means for informing the Institute community of "Tech Photo Fair." Notices will be posted on the bulletin boards this week, and the Hobby Shop will maintain a booth in Building 10 for 2 weeks featuring a photographic display. Radio station WTBS has agreed to do spot commercials on the contest.

Smaller Prizes Also

For high-quality photographs which do not win one of the top prizes, the Hobby Shop will award free Shop memberships, "leather" wineskins (made re-

cently by a Shop member for sale on the market), and perhaps other prizes. The number of such subsidiary awards in each division will be determined by the judges after the contest closes.

Although this is not yet official, the Hobby Shop may obtain the use of the Library's 1st floor corridor for displaying the winning photographs.

Closes November 30

All those interested in entering "Tech Photo Fair," note this important fact: the contest closes on November 30, 1961. Additional information and entry blanks may be obtained at the Hobby Shop, room 2-051, or by calling MIT extension 143.

As a sidenote to the contest, shutterbugs who like to do their own developing and printing are reminded that the Shop has a very well-equipped darkroom. Facilities for doing work in color photography have just been added. But try to get there well in advance of the contest deadline, because the darkroom has been very busy so far this year.

The love of justice is simply in the majority of men the fear of suffering injustice. — La Rochefoucauld.

Kibitzer

(Continued from page 4)

points earned for major suit contracts should both 5♦ and 5♥ be on) and therefore put South back in his secondary suit. Thus concluded an auction which featured four consecutive game bids, all of which were intended primarily as sacrifices! To make the situation even more ironical, the only game contract that was makeable was the only one that was voluntarily taken out.

West opened the ♠K and South saw that he was in deep trouble. Dummy had five losers in ♠ and there seemed to be no way of retaining control of the hand. Since there was no conceivable distribution against which the hand could be made legitimately, South's only hope was for poor defense. Playing the hand wide open, at trick two he led a small ♥ to Dummy's A and returned another small one towards his Q. East ducked, South's Q dropped West's J, and declarer's problems were over. East still had the ♥K, but this was the only trick for the defense.

Needless to say, should East hop up with the ♥K at trick three and return a ♣, it is curtains for declarer. He might as well ruff with the ♥Q and run diamonds as far as they go. But East still has the controlling trump and gets in in time to cash two tricks for the defenders. Then South is down two instead of making an overtrick.

THE COMMUNITY CHURCH

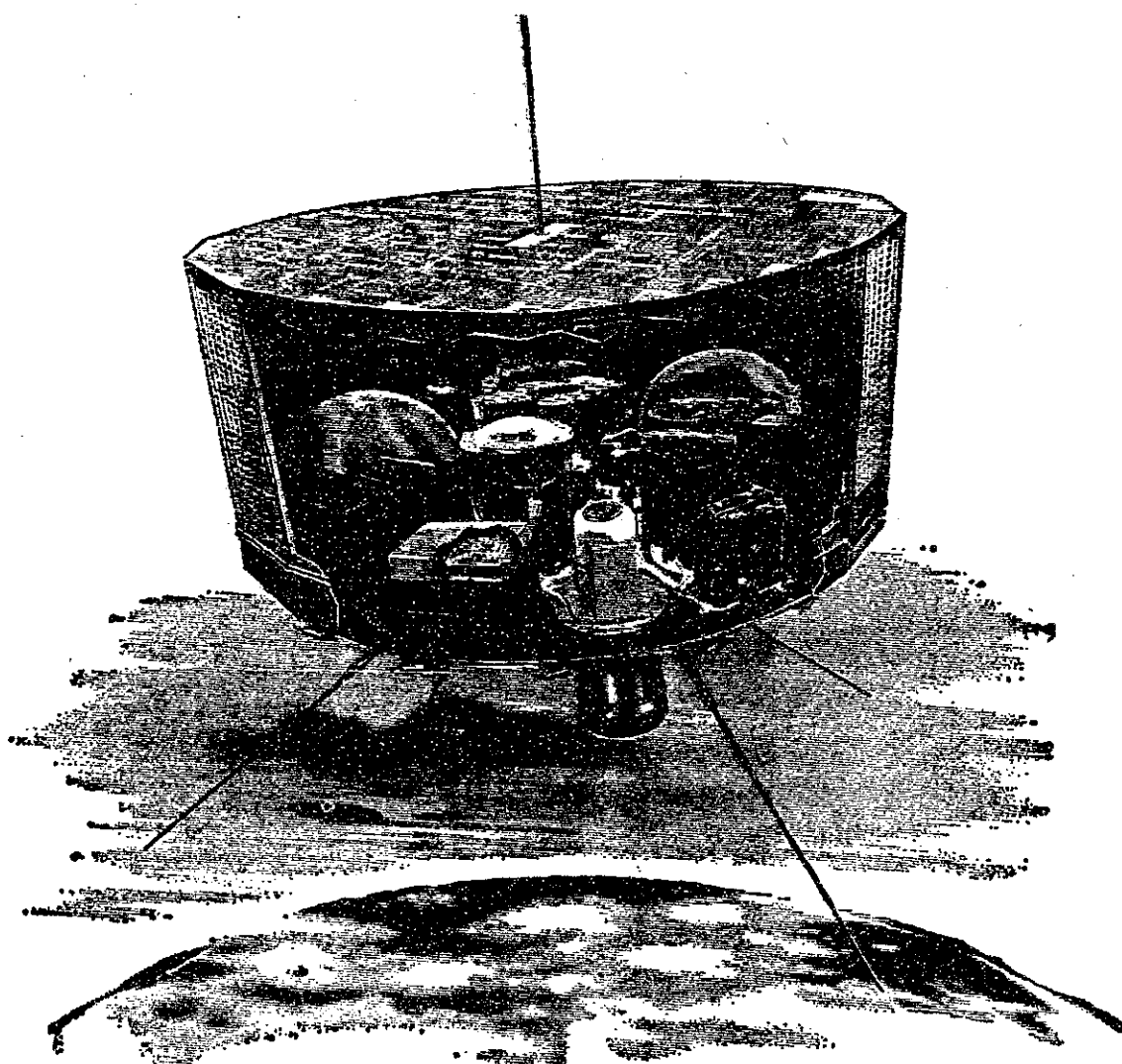
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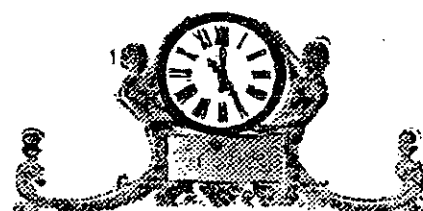
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Investment Club Planned

The Executive Committee of the Industrial Management Association, the undergraduate professional society of Course XV, has announced that it intends to form an investment club. This organization, to be named the I.M.A. Investment Club I, is being formed to promote an increased knowledge and interest in the stock market and in personal investment policies.

Beginning with about twenty members, each of whom will contribute monthly, the I.M.A. Investment Club One will invest the joint funds of its members. The club membership will make all decisions as to how to use its funds. It will decide what and when to buy, and may even decide to end the club's activities altogether.

Other Activities

Investment will not be the only activity of the Investment Club. It is hoped that members will gain from discussions, research, and guest speakers, as

well as from practical experience. Members may invest as little as five dollars monthly, although it is hoped that some larger sums will be invested. The I.M.A. Executive Committee does not expect any fortunes to be made, but it does expect the membership to learn a great deal about personal investment.

While it is now expected that only I.M.A. members will be allowed to join the Investment Club, all who are interested are invited to attend the organizational meeting today at 5 p.m. in the Barnard Room, first floor of building 52. I.M.A. membership dues are \$1.50 per year, and membership will be sold at this meeting. If you are interested, but cannot attend the meeting, contact Bill Pinkerson or Dan Gross at AL 4-9309 anytime after the meeting has been held.

Cherchez La Femme: NU, BU Social Events Highlight This Weekend

The mixer season is breathing its last for the fall term, so we hope you've found the girl of your dreams by now. In case you haven't, here may lie your last opportunities via the mixer trail.

Fall Frolics

Northeastern University will be the site of the "Fall Frolics," an acquaintance dance sponsored by the Newman Club Federation. The "Frolics" will be held in the girls' gym beginning at 8 p.m. Friday, Oct. 27. Admission will be \$1.

Open House

The Harriet E. Richards Co-op House of Boston University is holding an open house Saturday, Oct. 28 from 8 to 12 p.m. Admission is free, and the address is 191 Bay State Rd.

Calendar Of Events

(Continued from page 3)

Hopkins University, Baltimore Maryland.
Room 1-146, 2:00 p.m.
M.I.T. Chemical Society.
Meeting. "Biochemistry." Professor John Buchanan, M.I.T.
Spofford Room, 1-236, 5:00 p.m.
Seminar Sponsored By The Protestant Ministry.*
Seminar in New Testament Greek.
Dr. Goetchius, Episcopal Theological School.
317 Memorial Drive, 7:30 p.m.
M.I.T. Hillel Society.
Morris Burg Memorial Lecture.*
"Challenges to the Scholar: A Judaic View." Dr. Nahum Glatzer, Head of Judaic Studies, Brandeis University.
Kresge Auditorium, 8:00 p.m.
M.I.T. Hillel Society.*
Israeli Dancing. Admission 50c.
Walker Memorial, Room 201, 8:30 p.m.

M.I.T. ON WGBH-TV,
CHANNEL 2
M.I.T. Science Reporter.
"A Nobel Laureate Looks at Science." Dr. Bert Little with guest,

Dr. Donald Glaser, recipient of the 1960 Nobel Prize in Physics and Visiting Professor of Biology at M.I.T.
Wed., Oct. 24, 9:30 p.m. and Sun., Oct. 29, 4:00 p.m.

EXHIBITS*

Hayden Gallery.
Art Exhibit: A selection of paintings from the Corcoran Art Gallery Biennial. Displayed through October 29. Gallery hours: Monday through Friday, 10:00 a.m.-5:00 p.m. Saturday and Sunday, 2:00-5:00 p.m.

Photo Service Gallery
(211 Massachusetts Avenue)
Photographic Salon prints by J. Ivan Sherry of Toledo, Ohio. Exhibit consists of varied subjects. Displayed through November 17.

Faculty Club.
Work by students of Robert O. Preusser, Professor of Visual Design. Early New England pottery collected by Professor F. H. Norton.

Subscribe to *The Tech*

TCA 'Thanks-Giving' Charities Drive Set For Mid-November

The traditional TCA Charities drive will don a new appearance this fall. With a note borrowed from the Thanksgiving holiday, the TCA plans to rechristen the drive "The TCA Thanks-Giving," and will focus attention on the spirit of gratitude and generosity engendered by this festive season.

Tradition includes CARE and the World University Service among the charities sponsored, and word is soon expected as to which others will round out the list. Since the "Thanks-Giving" will be the only recognized undergraduate charities drive at MIT, a great deal of attention will be given to just which charities are chosen for representation. Any suggestions submitted to Sheila at the TCA office in Walker Memorial will be given due consideration.

The "Thanks-Giving" is tentatively slated for the week of Nov. 13.

ENGINEERS SCIENTISTS



IF THE SHOE FITS...

...then we probably have nothing to offer you now. We like to fill our big-shoe jobs from within. So if you're looking for room to grow, try us. Our senior engineers and executives of the future must come up from the college ranks of today. Many of our top men began their careers in our engineering departments—and not so long ago. Time now for you to take that first step: sign up for an interview with the men from General Dynamics. See your placement officer or write Mr. H. T. Brooks, Manager of Personnel Placement, General Dynamics, P.O. Box 2672, San Diego, 12, Calif. An Equal Opportunity Employer

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Looking Back...

75 Years Ago

We are greatly pleased to see that our suggestion of last year regarding the foundation of a banjo club, has been so favorably received. Our banjo club will be considerably larger than the Yale Club, and will contain a greater variety of instruments, it being the intention to have several mandolins and a flute, besides the banjos and guitars.

No more important announcement has come to us recently, than that which says it has been decided to abandon the lower workings of some of the great Comstock mines, and allow them to fill with water.

The foot ball team, with four of the regular men's places filled by substitutes, went out to Cambridge on October 20 and were beaten by Harvard, 59-0. It was found impossible to hold the Harvard rushers with our light men, and they made a series of touchdowns and goals which made the score 53-0 at the end of the first half. In the second half, which was limited to fifteen minutes on account of the darkness, Harvard only succeeded in getting a touchdown.

Knee-breeches look too juvenile for a place of such high standing as the Institute—don long trowsers, men of '90.

The '88 architects have challenged any of the other courses for a game of football, or for any other game. Architects are never lacking in nerve.

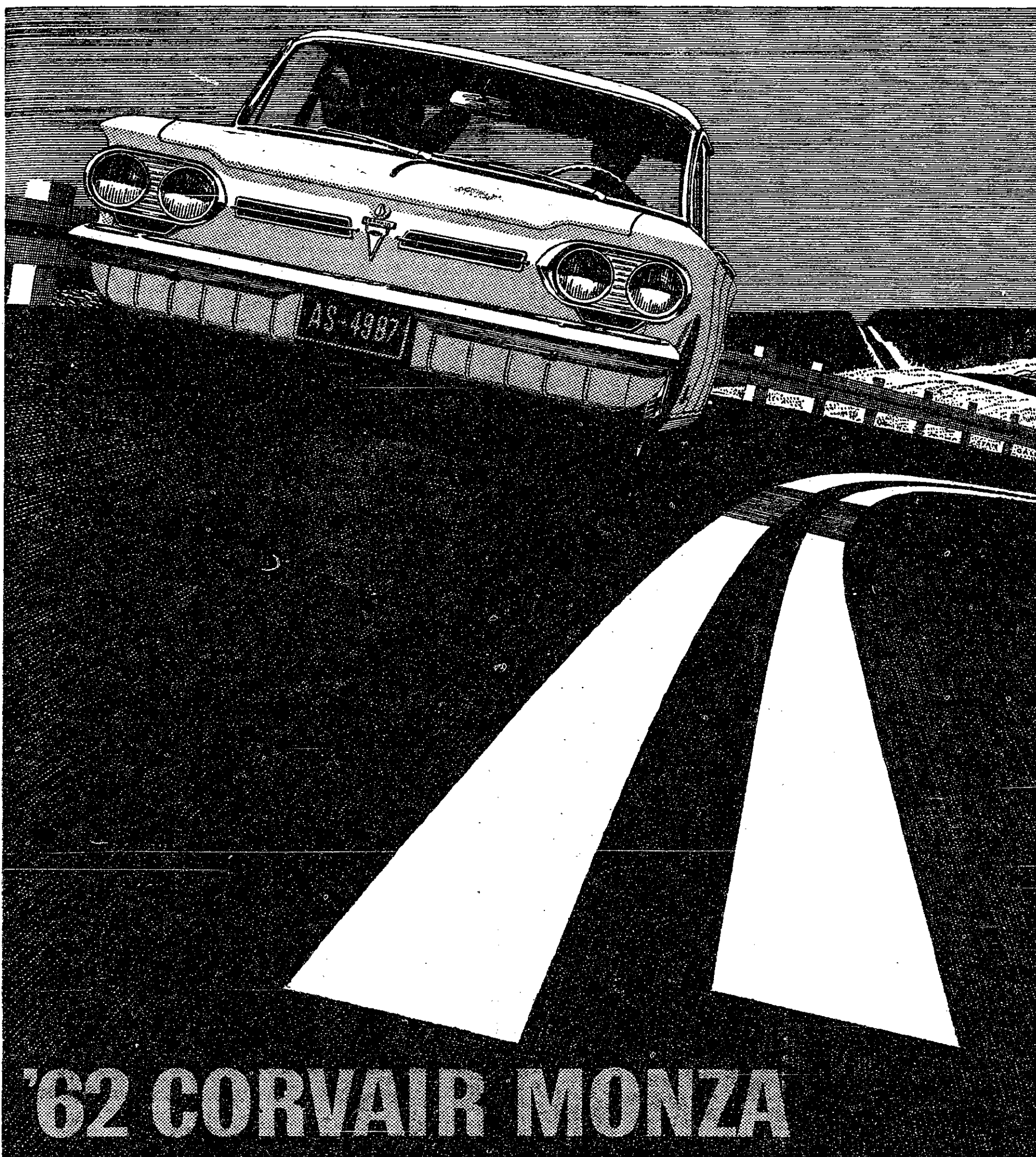
50 Years Ago

The man who put the iron washer in the peanut machine in Union corridor must be the "meanest man in the Institute."

Last evening at the Union, the Mechanical Engineering Society held its first meeting of the year with an attendance of over a hundred and twenty-five. After all the courses had been served and the cigars passed around the president of the society addressed the men. The second speaker was the witty Professor Riley, who entertained the men with an account of how an excursion upon an oil-carrying vessel, taken in order to study marine engines for a thesis, turned out to be an exciting and pleasant one-month vacation. The well known Mr. Jack Armour of New York next entertained the men with an excellent series of humorous stories which caused a continual laugh for almost half an hour. Finally Professor Miller, head of the department, took the floor. He outlined the new changes effected in the course, such as the increase in study of the German language and the increase in the study of mathematics as applied to practical problems. These increases will be accompanied by a decrease in the studies which Professor Miller considers less important. The meeting then broke up with a rousing MIT yell for Professor Miller.

25 Years Ago

Voo Doo takes a step forward with its first issue of the year by using a new and economical method in the printing of its magazine. Let us hope that this is just the first step in a campaign to put Voo Doo in its proper class as a humorous magazine. The large amount of space allotted in the last issue to the spinning of silly yarns is deplorable. Most of these appear to be midnight attempts of staff members to fill the issue, and get it ready in time for the magazine to go to press. Especially does this seem true of a little thing called "My Impressions of Canada (Gained from Never Having Been There)." An appropriate addition to the caption might be "Also Gained from Never Before Attempting to be Humorous." And of the few jokes which are printed, as usual the best are ones reprinted from other magazines.



'62 CORVAIR MONZA

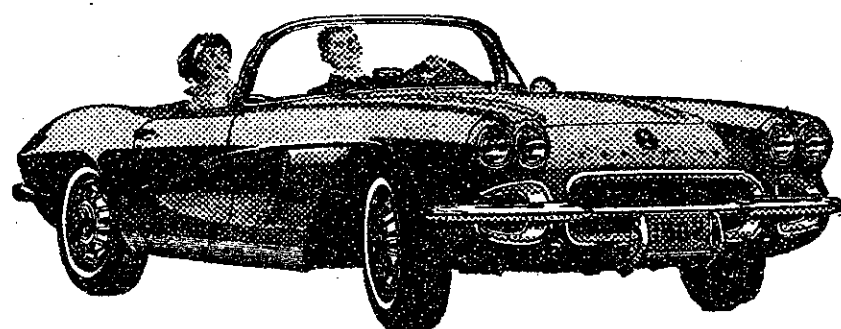
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theater...

Intense Ibsen Drama Creditably Performed

While the MIT Community Players' production of "The Wild Duck" did lack professional finesse, it was amateur theater at its best.

The play itself, while not Ibsen's best, is still an extraordinarily complicated piece, one which would challenge actors of the first magnitude. The power of the play builds up very slowly and even a slight misstep can break its spell for minutes afterwards. In others of Ibsen's plays the characters are walking concepts and this is true here; however, in this piece, this is not emphasized nearly as much as elsewhere, and, until the last act, it is an intensely human drama.

Right + Right = Wrong

The theme of the play is the conflict between idealism and realism. It shows the tragic consequences which can arise when the two are mixed in the wrong proportions. In the first act we see the contrast between successful realism and unsuccessful idealism personified in father and son. At first we are sympathetic with the father, but gradually our allegiances are swayed until at the end we are immersed in commiseration with the son, with his impotent idealism.

This is a very difficult play to hold together effectively. The Players must be commended on the way they succeeded at this in acts 3 and 4, but in the other three, the performance just did not hold together. In these three, there was at least one weak performance each, and these detracted from the whole. Since this drama is very subtle and slow building, and since the parts are so completely interdependent, these acts could not be termed successes.

The star of the show, or at least one of them, was evidently supposed to be Gabe Shapiro as Gregers. He showed himself to be a very good actor, but it took him some time before he stopped being the actor Gabe Shapiro and started being the man, Gregers Werle. Let us

hope that this was merely something akin to opening night stage fright.

Too Strong For Part

Gregers' father was played by Theodore B. Jacobs. While this was a minor part, Mr. Jacobs still managed to convey to the audience an understanding of and sympathy for the old gentleman. As long as he was on stage, we simply could not condemn, or even see anything amiss with his philosophy of life. If anything, Mr. Jacobs was too effective in the scenes with his son. We were prevented from having our emotions tangled in the way Ibsen evidently meant because Mr. Shapiro was completely overshadowed except in the last dialogue between the two.

Hjalmar was played well by Joseph Khoury. He made the father a living being. The play is so constituted so that if Hjalmar is not well played, he can easily degenerate into an imaginative fantasy, but this did not happen and that is all to Mr. Khoury's credit. The only weakness in his part, and a slight one at that, was that his behavior at the immediate moment of the revelation did not seem consistent with the character as he played him.

Thief Who Stole The Show

If one is to select a star of the show, however, that honor would have to go to Samuel Millman as the grandfather. He managed to upstage everyone. Mr. Millman must be an acute student of life to act the part as he did. His every action was consistent with the part. You knew him as the old man next door.

Next we come to one of the weak links in my opinion, Patricia O'Reilly as Gina Ekdal. At times she was the star of the show, but at other times she was definitely a discordant

note and the latter moments were frequent enough to disturb the pattern of the play as a whole. It seemed as though she, every once in a while, lost interest in the part and just said her lines to get them out. Again, on a couple of occasions when she was on the sidelines, she stopped being part of the play and started watching it.

Again! Too Much-Too Little

The last of the major characters is Hedvig Ekdal played by Erin Oberly. She is young and shows promise, but she was guilty of that cardinal sin of the theater, overacting. It wasn't too serious, but it was noticeable. I would be tempted to speculate that this arose from trying too hard to act the part in a way which she did not truly feel represented the character she was portraying.

If the play were still around, I would recommend it to everybody interested in drama with the exception of those connoisseurs who like everything perfect, even though in their heart they know no play can live up to those standards. However, if this is typical of the quality of the Community Players, their future productions should be very worthwhile.

Richard N. Waterhouse '65

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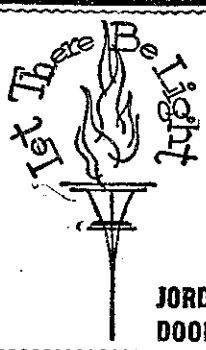
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MIT Hosts Over 100 Counselors

MIT has hosted over a hundred high school counselors from secondary schools around the country. MIT's sixth annual guidance conference ran from Sunday, October the first, until Tuesday, the third. The closely-packed schedule of the conference included speeches and discussions on the guidance of high school students considering further education.

The large group of counselors from almost every state in the union first met together in the Little Theater, Kresge Auditorium, on Monday morning. After a welcome by Roland B. Greeley, Director of Admissions, the group heard short addresses by Albert Bush-Brown, Herbert H. Woodson, Ithiel de Sola Pool, Houlder Hudgins, and Irwin W. Sizer, representatives of the five schools of MIT. This meeting was followed by a luncheon and discussion groups on various subjects including advanced

placement, foreign language, and financial aid. A similar program, with special emphasis on college admissions was held Tuesday.

Besides broadening the knowledge of the guidance counselors, the Institute paid all expenses over \$50 for each attendant. The party was lodged in the Hotel Bellevue and transportation to and from the school was provided. An undergraduate student accompanied each person to answer questions about the school.

Counselors were deeply impressed by MIT's wide variety of courses and many types of students. Most had pictured MIT as a college offering little besides science and engineering. With over 1200 colleges in the nation it is difficult to learn much about anyone. The MIT faculty hopes it has changed the concept of many counselors about technical schools.

COOP

Annual Meeting

The annual meeting of the membership of the Harvard Cooperative Society, in accordance with Article XIV of the By-Laws, will be held in...

Harvard Hall 1

Wednesday, Oct. 25, 1961

5 p.m.

Members who have joined since July 1, 1961 are Participating Members and are cordially invited to attend.

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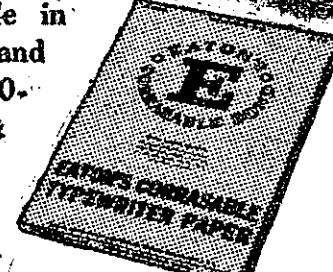
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Entertainment-wise

"Fiorello" To Open At Shubert Nov. 6

By Warren Wiscombe '64

The biggest news in the entertainment sector seems to be the arrival of "Fiorello," which, according to Time magazine, is a "lively and enjoyable musical" about "a dynamic human being in a razzle-dazzle era." This Broadway smash hit, which opened to rave reviews and which is still playing to SRO audiences in New York, will begin a four week engagement at the Shubert Nov. 6. It is the story of the loves and adventures of Manhattan's peppery little mayor set against a background of the Roaring Twenties — an era whose nonconformity meshed beautifully with Fiorello's.

A touring Theater Guild and American Theater Society company are currently presenting Paddy Chayevsky's "The Tenth Man," and the cast includes major members of the Broadway production. This is a serious drama of a possessed young woman with action centering around a synagogue.

Johnny Mathis will be at the

Donnelly Memorial Theater for one of those whirlwind one night stands on Tuesday, Nov. 7. Tickets are available at a variety of places, including The Place itself (a bistro on Huntington Ave.), TCA, Briggs and Briggs in Harvard Sq. and Filene's.

A group of unemployed persons are presenting a play called "The White Devil" at the Loeb Drama Center in Cambridge, Thursday, Oct. 26 through Saturday, Nov. 4. The Harvard Dramatic Club is responsible for this event.

The Brattle Theater in Harvard Sq. is presenting the movie "And Quietly Flows the Don," which is an adaptation of Mikhail Sholokhov's massive novel of Cossack life on the Don River. The plot involves Grigory, a handsome young Cossack, in a period of Russian history during the First World War and

shortly thereafter. The two heroines are Grigory's wife and another woman who is very beautiful and very dissatisfied with the husband she has, and who would undoubtedly like to trade him for Grigory.

Another popular theater with MIT students is the University in Harvard Square which is presenting the double bill of "Never on Sunday" and "Frantic."

WARNING to those planning to attend the Charles Playhouse:

(1) Boston's only off-Broadway playhouse with on-Broadway prices has added some new seats to its balcony, and they have an obstructed view. Only the first row provides a clear view of the stage. Bear this in mind when buying tickets.

(2) Be sure to arrive somewhat early if picking up tickets at the boxoffice — you are in store for a joyous 15 minutes of waiting. The find-your-own-seat system is also quite novel. These little inefficiencies sometimes delay the curtain rising by as much as a half hour.

In all fairness, however, we must admit that "The Great God Brown" is very good and is worth the inconveniences.

Glatzer To Lecture Nov. 1:

'Challenges To The Scholar'

The 12th Morris Burg Memorial Lecture, "Challenges to the Scholar: A Judaic View," will be delivered by Nahum N. Glatzer Wednesday evening, Nov. 1 at 8 o'clock in Kresge Auditorium.

Dr. Glatzer is chairman of the Department of Near Eastern and Judaic Studies at Brandeis University. An authority on the development of Judaism through the ages, he was on the faculty of the University of Frankfurt. A member of the Brandeis faculty since 1950, he was made a Guggenheim Fellow for 1959-60. Besides having written numerous books and essays, Dr. Glatzer is a University Associate at Columbia University and a Fellow of the International Institute of Arts and Letters.

The lecture is under the auspices of the B'nai B'rith Hillel Foundation. It is open to the public.

Movie Schedule

ASTOR — "Splendor in The Grass," 1:00, 3:05, 5:10, 7:10, 9:15.

BEACON HILL — "Rocco And His Brothers," 1:35, 4:05, 6:35, 9:10.

BOSTON — "Windjammer," Two Showings at 2:30 and 7:30 p.m.

BRATTLE — "And Quiet Flows the Don," 5:30, 7:30, 9:30.

CAPRI — "Breakfast at Tiffany's," 1:30, 3:30, 5:30, 7:30, 9:30.

CENTER — "Nature Girl and The Slaver," No Time Available.

EXETER — "Purple Noon," 2:15, 4:25, 6:40, 9:00. Shorts, 2:00, 4:10, 6:25, 8:40.

FENWAY — "L'Adventure," 2:00, 4:30, 7:00, 9:30.

FINE ARTS — Through Thursday: "Jazz on A Summer's Day," 5:30, 8:45.

"Black Orpheus," 7:00, 10:00. Starting Friday: "Nights of the Cavaria," and "The Bespoke Overcoat," No Times Available.

GARY — "Guns of Navarone," 1:00, 3:40, 6:20, 9:05.

KEITH MEMORIAL — "Backstreet," 1:00, 4:00, 7:05, 10:00. "Troubles in the Sky," 2:45, 5:50, 8:55.

KENMORE — "Two Women," 1:00, 2:45, 4:35, 6:25, 8:10, 10:00. "Mr. Magoo," 2:40, 4:25, 6:15, 8:00, 9:50.

LOEW'S ORPHEUM — "The Devil at Four O'Clock," No Times Available.

MAYFLOWER — "Romanoff and Juliet," and "Doctor at Large," No Times Available.

METROPOLITAN — "The Hustler," 1:00, 3:40, 6:20, 9:05.

PILGRIM — "The Great War," and "Season of Passion," No Times Available.

SAXON — "Good-Bye Again," 1:00, 3:05, 5:10, 7:15, 9:20.

STATE — "Geisha Playmate," and "Young Love," No Times Available.

TELEPIX — "The Crime of M. Lange," 1:37, 3:39, 5:41, 7:45, 9:49.

"Paris Weekend," 1:00, 2:55, 4:57, 7:01, 9:05.

UNIVERSITY — "Come September," and "Honeymoon Machine," No Times Available.

UPTOWN — "Ada," and "Two Loves," No Times Available.

Theatre Schedule

CHARLES — "The Great God Brown," by Eugene O'Neill. Tuesday-Friday 8:30; Saturday 5:30, 9:00; Sunday 3:00, 7:30.

COLONIAL — "The Complaisant Lover," the Graham Greene comedy about adultery between a dull dentist, his wife, and her lover, and featuring Michael Redgrave. Nightly at 8:30 with Matinee on Thursday and Saturday at 2:30.

SHUBERT — "By-Bye Birdie," for two more weeks, the "Tony"-award winning musical brings its New York cast from Broadway, including Dick Gautier and Kay Medford. Nightly at 8:30; Matinee on Wednesday and Saturday at 2:30.

WILBUR — "The Tenth Man," by Paddy Chayevsky, for two more weeks. No Times Available.

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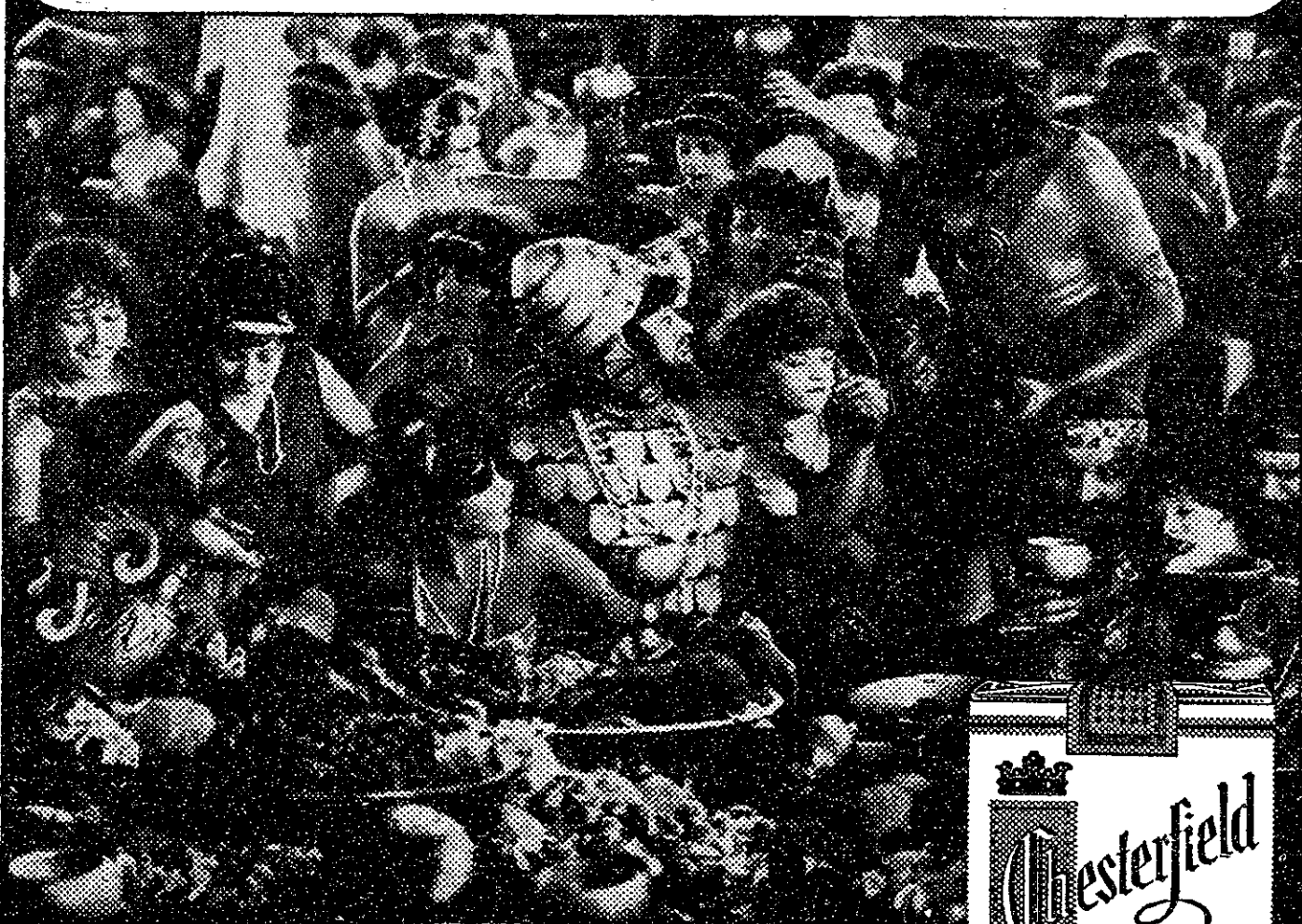
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—Herb Caen, San Francisco Chronicle

Scientists Converge

First Magnetism Conference Nov. 1

More than 400 scientists will meet at M.I.T. November 1-4 for the First International Conference on High Magnetic Fields, sponsored by the Air Force Office of Scientific Research (AFOSR).

Nearly 100 technical papers dealing with the generation and experimental use of very intense magnetic fields will be presented.

Although primary emphasis will be placed on the use of intense external magnetic fields for the study of solids, biological effects of magnetic fields have only recently attracted much attention and this conference will provide the first opportunity for researchers in this field to meet.

Conference sessions, all of which are open, will be held in the Kresge Auditorium at M.I.T.

The National Magnet Laboratory, which will host the conference, was started a year ago under a contract with the Air Force Office of Scientific Research. When completed, it will be capable of producing continuous external magnetic fields of up to 250,000 gauss in strength, the world's strongest continuous magnetic fields. The Laboratory facilities will be available to researchers throughout the nation.

Dr. James R. Killian, will address the opening session on

behalf of the University. Dr. Millsaps will give the welcome of the Air Force and also present a commemorative scroll to Dr. Killian in recognition of M.I.T.'s outstanding achievements in education, science and technology on the occasion of the centennial of its founding.

Dr. Charles H. Townes, M.I.T. Provost, who pioneered microwave amplification by stimulated emission of radiation (masers), will address the conference Thursday, November 2.

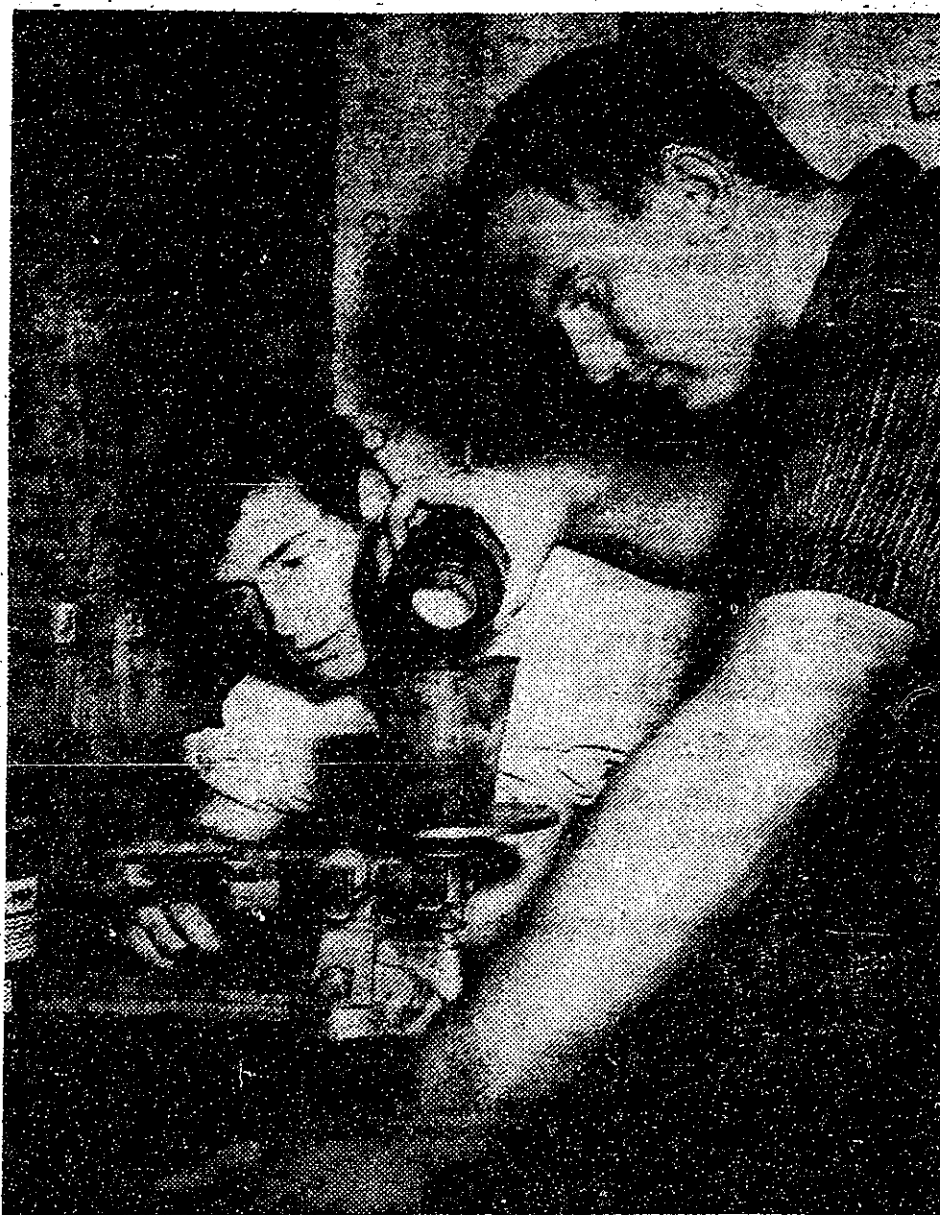
The proceedings of the conference are to be published by Technology Press.

TCC To Sponsor Discussion Of 'Science And Religion'

A panel discussion of "Science and Religion" will be sponsored Wednesday at 5:00 PM in the Little Theater of Kresge by the Technology Catholic Club. The panel, Dr. Gerald Holton, Professor of Physics at Harvard's Lyman Laboratory of Physics; the Rev. William Sullivan, from Metropolitan State Hospital; and Mr. Peter Solomon, a Harvard graduate student from New Zealand; will discuss questions pertinent to the interplay of science and religion.

The floor will be open to group discussion following the panel.

Develop New Solid Rocket Fuel



Ron Winston (left) and Frank Kosdon '63 are shown weighing out components of the solid propellant rocket fuel which they reported on as being safe for amateur use.

MIT Junior Shares \$1000 ARS Prize

The development of a rocket propellant which is safe for amateur use has won two members of the MIT Rocket Research Society a \$1000 American Rocket Society award.

Franklin J. Kosdon, MIT '63 and Ronald H. Winston, Harvard, received the prize for their paper entitled "Experimental Development of an Isocyanate Solid Propellant."

Their paper described the empirical evaluation of a propellant mixture with improved casting properties. Their result was an organic compound that produces a rubbery solid propellant which burns stably when ignited.

The two man team carried out 137 static tests in the MITRRS test cell, the last 40 of which were successful. During these tests they obtained accurate measurements of chamber pressure and thrust, two of the most important calculations obtainable in a test cell.

The award, donated by Chrysler Corporation, was presented at a luncheon held during the American Rocket Society's week-long "Space Flight Report To The Nation." Senator Jacob Javits, officials of the Society and an estimated 500 teachers and students were present.

The two scientists met in the MITRRS as freshmen and began working nights in the small basement lab.

Kosdon provided much of the scientific data for the 33 page report, and Winston did a major part of the writing. The result was "the best paper written by any undergraduate concerning the art of rocketry."

Debate Society Begins Season By Entering Tournament At Brown

The MIT Debate Society began its season by entering strong teams in two varsity debates.

At Brown University, Oct. 20-21, the first big tournament of the season boasted thirty-five teams. The "A" team of John Castle '63, and Steve Wanner '63, affirmative, with Glen Books and John Morris '64, negative, was in strong contention all the way into the final round before yielding the first place trophy to Holy Cross. John Morris was awarded the second negative speaker trophy for the tournament. The "B" team of Mike Auerbach '65, and Pete Whalen '65, affirmative, with Ralph Grabowski '63, and Gene Finkin '62, negative, also placed well.

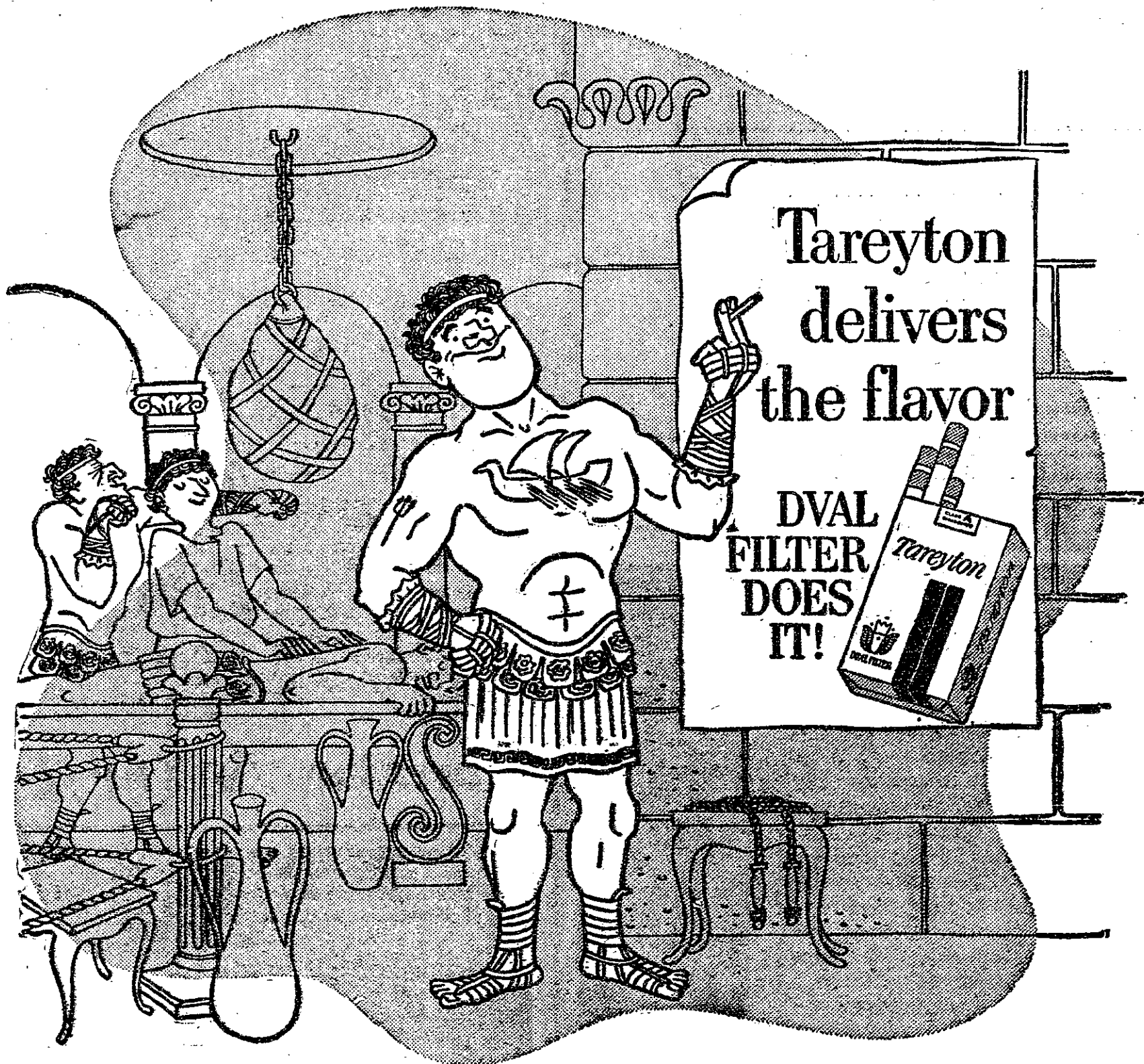
At the Greater Boston tournament at Eastern Nazarene, the previous weekend, the negative team of Books and Morris finished undefeated, tied for the position of first negative team.

Leavitt Named To Admissions Office

Appointment of Peter D. Leavitt as assistant director of admissions was announced by Professor Roland B. Greeley, director of admissions.

Mr. Leavitt, who is 25, was born in Quincy, Mass. After graduating from Quincy High School, he served for two years with the U. S. Coast Guard. He attended Union College in Barboursville, Ky., receiving a bachelor of arts degree in 1960.

He was a marketing research associate for Liberty Mutual Insurance Co. and was assistant director of admissions at Babson Institute before coming to MIT.



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IM Wrestling Starts Friday

The annual Intramural Wrestling tournament will begin at 7:00 Friday, October 28, in the Dupont Wrestling Room. Weigh-ins will be held from noon to 4:00 on Friday. It is still possible for additional teams to enter the tournament; rosters and deposits will be accepted at the Athletic Association office until 4:00 Wednesday (today).

Friday night will provide the bulk of the wrestling, with preliminary, first round, quarter-final, and semi-final events that evening; the first consolation round will be on Friday as well. Saturday will feature the remaining consolation rounds and the finals; action on Saturday begins at 2:00.

Wrestlers should remember that losing a match does not eliminate a man from the tournament. Wrestlers who have lost one match to a man who continues winning may wrestle in the consolation rounds.

IM Fall Sailing Finals Held On River Today

Qualifying rounds and semi-finals in the fall Intramural sailing regatta were held Oct. 17, 18 and 19. Final races began yesterday and continue today at 4:30 on the Charles.

Phi Gamma Delta finished first with 14 points in the early rounds, with Grad House a close second at 16. Sigma Alpha Epsilon took third with 31 points; the remaining finalist was Theta Delta Chi with 45.

Tom Hastings '61 and Brian Strong '62 took four firsts, a second and two fourths in the preliminaries to give Phi Gamma the top spot. Bill McCandless and Louis Gleanville handled the Grad House boat, placing five times and showing twice. Bill Bails '62 and Harley Jordan '63 nailed two firsts, a second, two fifths, an eighth and a ninth for SAE. Two fourths, two sixths, a seventh and two ninths were turned in by Craig Sawyer and George Feltz for Theta Delta Chi.

IM Hockey Forms Two Divisions To Better Competition

Wednesday, Nov. 1 is the deadline for registration in this year's Intramural hockey program. Rosters and deposits are due in the Athletic Assn. office at that time.

Hockey this year will be split into two groups: The A Division will consist of last year's better teams, while new teams and last year's underlings will comprise the B Division. This is done so as to improve competition among the top teams and to provide the other teams with a chance to skate and have some fun at their own level.

Bow To Air Force, 5-1

Soccermen Meet BU Today

By Mitch Chelitz '63

MIT's powerful soccer team, leading the race for the New England championship, received its first setback of the season Saturday at the hands of the Air Force, 5-1. This afternoon at 3:00 on Briggs Field the soccermen take on Boston University; Tech is expected to win this one, but not without a fight.

A team of 18 men left from Logan International Airport Thursday afternoon for the Air Force Academy at Colorado Springs. They expected to find the Air Force soccer team in excellent condition, but they hoped to outmaneuver them with the ball control they had used so well in the other five games of the season.

During practice Friday morning the team found that the high altitude, over 7200 feet, had two effects on its playing. Because of the thinner atmosphere the ball traveled farther and bounced higher; and because of the scarcity of oxygen the team became tired more quickly than usual. Coach Berman hoped that his men would be used to the new climate before the game.

Unfortunately, this was not to be. The game started with MIT in full control of the ball, and the line pressed in for a few shots, blocked easily by the Air Force goalkeeper. The line tired quickly, however, and the Air Force began to take the offensive. The MIT defense could not hold up long, and before the half had ended the cadets had scored three times.

Refreshed after the halftime rest, MIT again took control of the ball and quickly scored its first goal when Capt. Dirk Berghager '62 scored on a direct kick from outside the penalty zone. With the score 3-1, MIT pressed hard for another tally and it looked like they would get it when, in the third quarter, Bob Mehrabian '64 was fouled in the penalty zone. His shot was hard to the left side of the goal but the Air Force goaltender, perhaps the best encountered this season, managed

not only to block it but to catch it.

This failure to score snapped the MIT attack and the remainder of the game was played defensively. In each of the last quarters the cadets scored once and the tired MIT soccer team left the field defeated for the first time this year, the final score 5-1.

This defeat by the Air Force does not hurt MIT's chances for the New England title because it was not a league game. The soccer team hopes to keep its local undefeated status by beating Boston University today at 3:00 on Briggs Field. In 11 games since 1950, BU has won only one to Tech's 10. However, with several good forwards, BU should give the Engineers a good battle this year.

Saturday the tables will be turned as MIT travels to Springfield; Tech has managed only three ties against 14 losses in the series with Springfield. However, in 1956 and 1959 the teams tied 1-1, and last year Springfield won by the narrow margin of 2-1. Also undefeated in New England this year, Springfield poses the major obstacle to MIT's championship fortunes. Tech's outstanding performance this fall ensures that this meeting will be the soccer game of the week in New England.

Next Wednesday the soccermen visit Coast Guard, and

Face Springfield Saturday

close their season against Army on Saturday, Nov. 4.

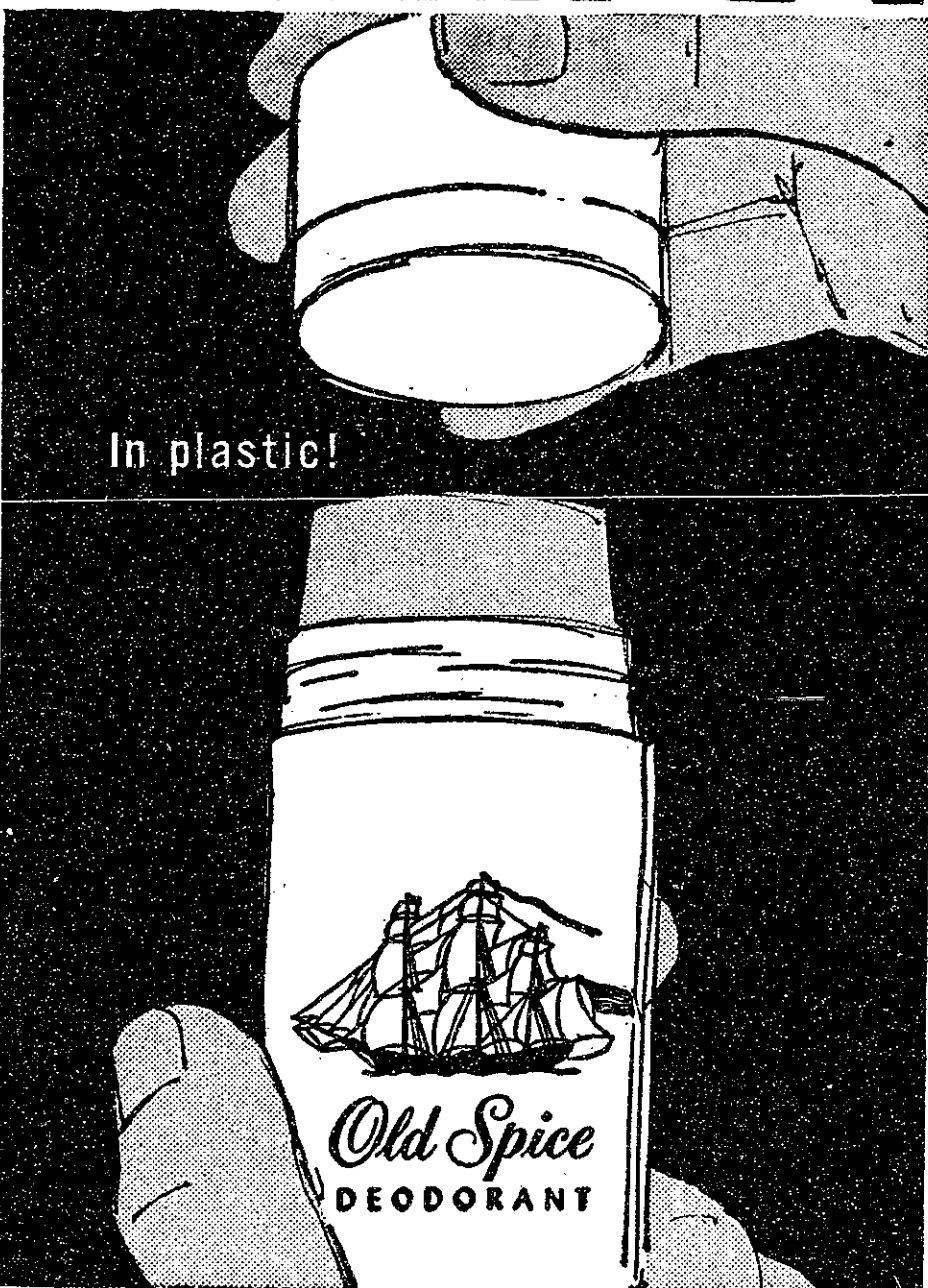
Frosh Lose, 4-1

Last Wednesday the freshman soccer team lost a well played game to Harvard, 4-1. The game was at home, with a stiff wind from the west and the setting sun both hampering shots at the west goal. In spite of this handicap, four of the five goals were scored in this net.

The game was marked by a lot of play around both goals, although more at Harvard's goal than Tech's, and many good saves by the goalies. Harvard drew first blood as they scored after only two minutes of play. Tech gained strength rapidly and managed to control the ball for the rest of the first quarter. In the second quarter Harvard scored again, against the wind this time, on a cross from the left inside to the left wing who kicked it in from the penalty circle.

About halfway through the third quarter Tech scored on a combination of short passes which placed the ball in easy scoring position at the left end of the goal. Harvard did not score again until the fourth quarter when they got two more goals, one spinning off the hands of the goalie and rolling into the goal and the other a high, fast shot into the upper corner of the goal.

MEN!



In plastic!

Radio Astronomers Claim Dipoles Will Hamper Their Work

(Continued from Page 1)

however, as solar pressure pushed the needles into the earth's atmosphere where they would burn up. The experimental belt is expected to last two or three years.

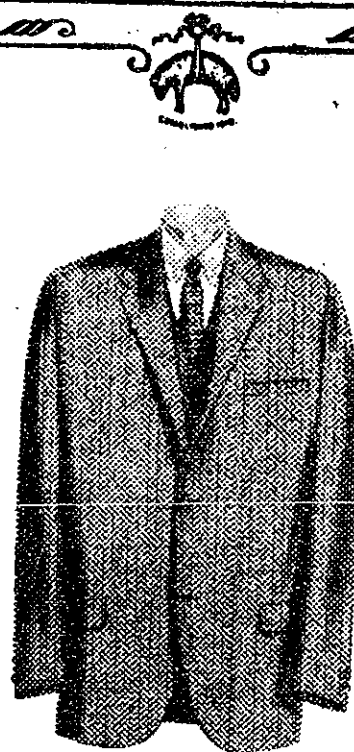
Astronomers all over the world have expressed strong criticism of the United States for this orbiting of many small particles.

Sr Bernard Lovell, director of England's Jodell Bank observatory, called the WEST FORD project a "stain" on this country's space research program. He said that this is not a scientific experiment, but it is intended to provide the United States military with a secure means of communication.

Sr Bernard also said that the Russians might use this "act of extra-terrestrial contamination for propaganda purposes."

On the other hand, Sir Harrie Massey, chairman of Britain's Space Committee, a nongovernmental organization, said that he did not feel that this first experiment will cause trouble, but he questioned the results of future developments of this plan.

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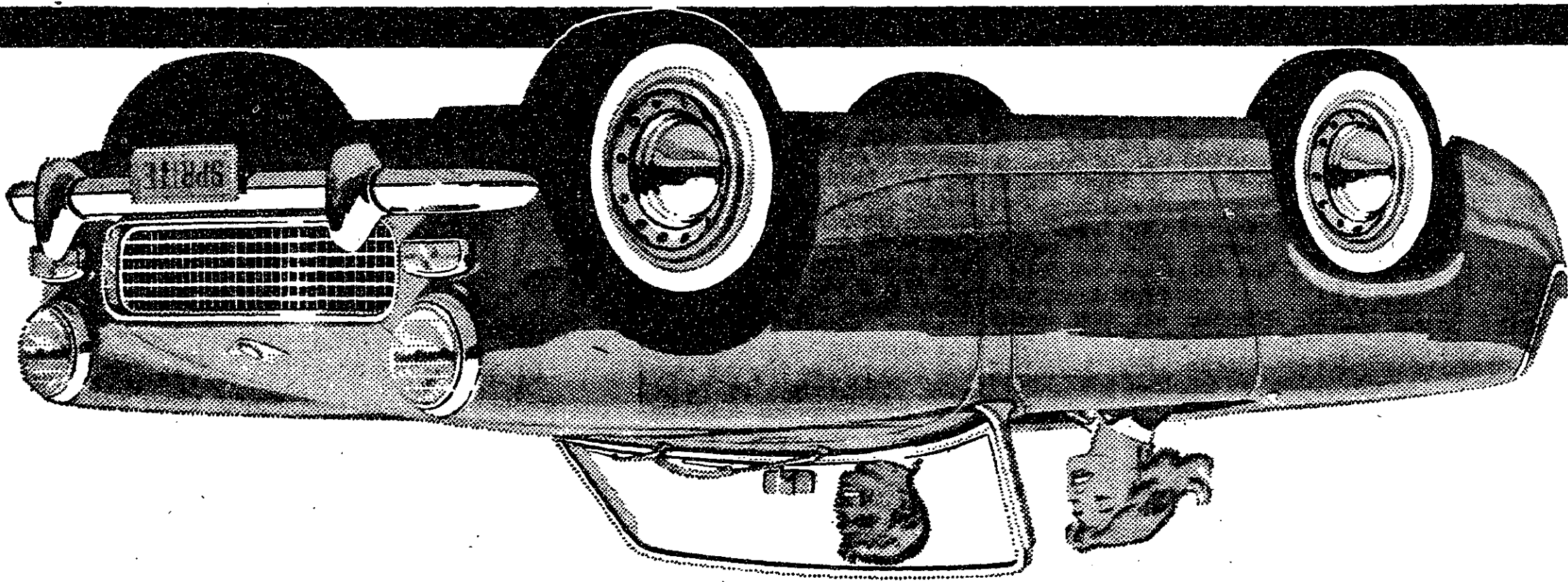
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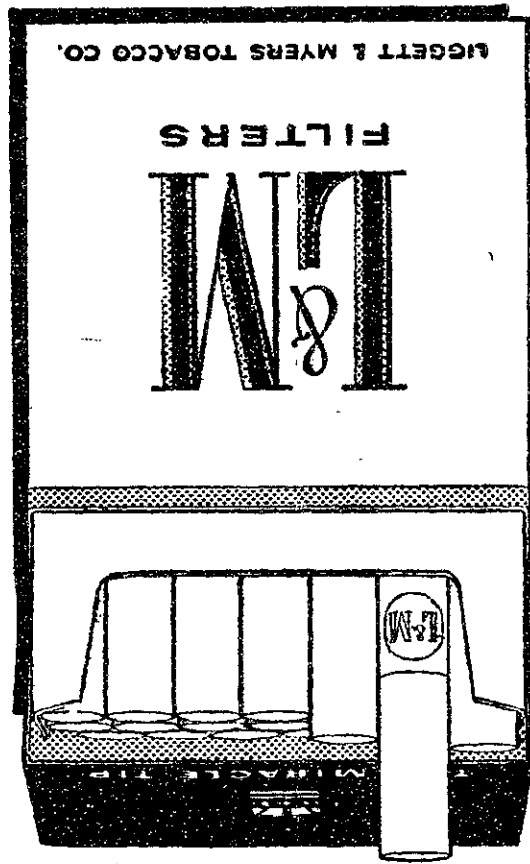
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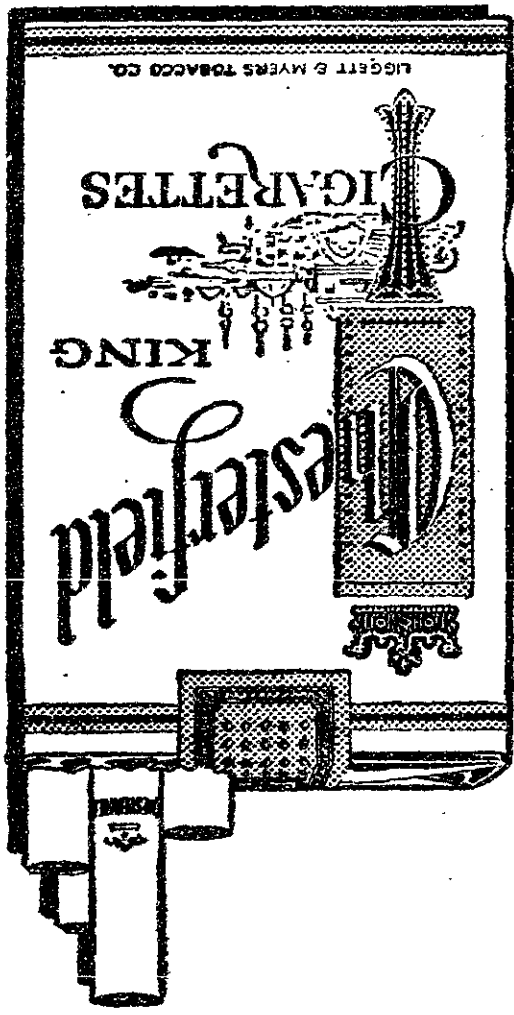
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Buy 5 packs and get started. There will be 8 new '62 Sprites on the campuses of little old New England by next May, and you might as well jingle the keys to one of them in your jeans...right?

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BELL TELEPHONE COMPANIES

TELEPHONE MAN-OF-THE MONTH



Fresh Sixth On Charles

MIT Third In Sloop Race

Sailing in rough winds, MIT sailors tied for third in the finals of the Fifth Annual Sloop Championships at Coast Guard last weekend. Sailing four out of the seven races Saturday, Tech was then tied for third place with Coast Guard, the 1959 champions.

Near-gale winds of 40 to 50 knots on Sunday called a halt to the regatta, securing first place for Harvard's Carter Ford, the defending 1960 champion. Second place went to BU, with the MIT team of Mike

Liftschitz '63, Bob Gray '64, Ken Klare '63, and Warren McCandless '62 (skipper), taking third.

The wind blew at Brown also last Sunday where the 25th annual sailing for the Hoyt Trophy was scheduled. Ken Klare and Harry Weil '64 of MIT were tied for first place when, after two races, the regatta was cancelled due to high winds which resulted in capsizes and breakdowns.

On home waters, the freshman individual championships were held. Scott Hynek, with John Navis crewing, sailed to a first in the eliminations Saturday, but was only able to take sixth in the finals Sunday, after fouling out in one race and capsizing in another.

Coming up next weekend at Coast Guard Academy is one of the most colorful events of the season, the New England Team Championships. Four skippers will represent MIT, as they sail in six match-races against other schools in a round-robin.

In team racing, extra alertness is required, for you sail not only for your own benefit, but also for that of your teammates in a tactics duel with your opponents. MIT is one of the dual defending champions, having tied for first with Coast Guard last year.

Graduate House Wins IM Tennis

Graduate House, led by its ace singles, had little difficulty in turning back surprise team East Campus, five-zero, for the intramural tennis championship. Throughout the tournament, Graduate House showed complete mastery of its opponents in defeating Delta Psi, Phi Delta Theta, Club Latino, Senior House, and East Campus by wide margins.

East Campus found the going rough all the way, edging out Phi Sigma Kappa, Phi Beta Epsilon, and Phi Gamma Delta by identical three-to-two counts before reaching the finals.

Phi Gamma Delta and Senior House "A" share third place by virtue of victories over Chinese Student Club and Baker House fifth place tie among Phi Beta Epsilon, Chinese Student Club, Baker House "A", and Club Latino.

IM Bowling Now Ten-pins; Old Walker Alleys Closed

Intramural bowling will be played with ten-pins this year, but not in the convenient location of Walker Memorial. Bowling leagues will compete from 5:30 to 7:00 on Monday and Tuesday evenings at Sammy White's Brighton Bowl, located on Soldier's Field Road just past the Boston Skating Club rink.

Rosters and fees are due by November 1 at the Athletic Association office in Dupont center; the schedule will begin November 13, running for eight weeks.

T-Club Picnic Saturday At Riverside Boat Club

The annual T-Club fall picnic will be held Oct. 28 at the Riverside Boat Club. This is located about two miles up Memorial Drive from MIT. The picnic starts at 6 p.m.; games and dancing will follow the food. Tickets at \$2.75 a couple are on sale now in Building 10 lobby, at the Athletic Assn. office, and from all team captains.

Gamble Second

Golfers Third In ECAC Tournament

The MIT golf squad placed third in the Eastern Colleges Athletic Conference tournament held at Farmingdale, New York last weekend. This tournament was comprised of the top eight teams in the New England area.

Only Syracuse and Navy were able to post a better score than the MIT foursome. MIT had a team score of 319 as compared to the 317 of Syracuse and the 318 of Navy.

The Engineers played brilliant golf throughout the tournament and were still in contention on the eighteenth green. Syracuse and Navy nosed out the MIT squad by birdieing the eighteenth hole. Even so, the team outplayed such teams as Army and Penn State.

MIT was led by Chuck Gamble '62 who fired a 75. The other finishers were Phil Robinson '62 with an 80, Raul Karman '62 with an 81, and Alden Foster with an 83.

On top of these team honors, Gamble, this year's captain placed second in the individual division of the tournament. Only a disastrous first hole, where

he took a double bogey, kept Gamble from winning the tournament.

With this fine performance, Gamble is looking forward to higher golfing achievements. Gamble said, "For seventeen holes, I played by far the best golf of my career. Take away that bad first hole and I would have had a real good day."

This was the last match Raul Karman will play for MIT. "Parkinson", as his teammates call him, has turned in a fine record on MIT golf squads. He will graduate in February.

Squash Rally Monday At 5:00 In Dupont

Both Varsity and Freshman squash gets underway with a rally next Monday, Oct. 30. Coach Ed Crocker hopes to meet all interested freshmen, as well as returning varsity men and last year's freshmen. The rally will begin at 5 p.m. in the Dupont Center squash courts.

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Meet The Captains

Chuck Gamble

Dirk Berghager



By Charlie Smith '62

Chuck Gamble, the 1962 golf captain, has had a lot of experience as a captain of a varsity athletic team. In addition to being this year's golf leader, he was co-captain of the 1960-61 Tech basketball squad and led the golf, cross country, and basketball teams in his senior year of high school. On top of these athletic honors, Chuck was elected president of his fraternity, Phi Gamma Delta.

Gamble comes from Littleton, Colorado, near Denver, where his home, oddly enough, is right in the middle of a golf course. Naturally, in this atmosphere, he learned to play golf. His time was not wasted. Besides playing on four varsity golf squads, Chuck has individually placed second in the New England Collegiate tournament and has won many local tournaments.

May Turn Pro

After finishing second in the Eastern Colleges Athletic tournament last weekend, Chuck is contemplating trying his luck at professional golf. He will not decide for sure, however, until after graduation.

During his three years of high school, Gamble spent most of his time running from one athletic field to another. He earned a letter in five sports: football, basketball, golf, track, and cross country. With Chuck leading the way, his high school, Littleton, advanced to the state championships in his senior year. As if this wasn't enough, Gamble was the quarterback on a state championship football team, won the state individual championship in cross country, and was rated highly in golf and as a high jumper on the track team.

Course XVI Major

After turning down three athletic scholarships, Chuck decided to come to MIT. Majoring in aeronautical engineering, he has maintained a creditable scholastic average. After graduation, he plans to work for the Martin Company in Denver. While the extra work required by the Institute is sometimes costly to his athletic performance, he is certain that it will pay off in the end.

Poker seems to be the only hobby that our golf captain has time in which to participate. He admits that he is not very lucky at cards but the "thrill" of a game intrigues him. Other than this, Chuck's time is pretty well tied up in athletics, school, and his fraternity. Sometimes Gamble feels that there are just not enough hours in a day.

Team Doing Well

On the MIT golf squad, Gamble played first man last spring and is continuing to do so this fall. Last spring the team compiled a 12-7 record and this fall had a 3-0 mark.

To top off a very successful fall season, the team placed third in the Eastern College Athletic Conference tournament. Gamble felt that the team played excellent golf all season and exceptionally so in this event.

This tournament winds up this fall's golf schedule but for Gamble this does not mean a rest. Although he is no longer captain, Chuck Gamble will continue to participate in MIT athletics, on the basketball floor.

By Dick Tsein '65

It is often said that soccer is the "international game". The varsity here at MIT is a case in point. The three forwards who first take the ball in play are Italian, Chinese, and Iraqi. More than half the starting eleven are foreign students, although there are several American standouts on the squad.

Of course, winning is a team effort; but if one player were to be singled out for contributing most to the team's success last season and this season, he would have to be Dirk Berghager '62, captain of the team, and All-American last year.

Looks Don't Count

Berghager does not look like the "All-American" type, if there is one; he is about 5'6", with a medium build. Actually, the characteristic first noticed about him is his red hair, which seems to be in or near the action in the game almost all the time. Part of the reason for this is the nature of the left-halfback position; the rest—well, that's the way he plays.

Dirk is fairly international in his own way. He is of German, English, and Portuguese extraction; he speaks all the languages fluently, as well as some French. At present, his home is in Monte-Estori, Portugal, near Lisbon, where his father is in the cork business.

Prep School in Switzerland

He attended secondary school in Switzerland, where he first began playing soccer in earnest, although, like most Europeans, he played in grade school just as we play football here. (This is the reason so many good soccer players are foreign students; it takes several years to develop a really good player, and Americans don't generally have the opportunity.)

As for his personal plans, Dirk is studying Mechanical Engineering, and plans to work in some underdeveloped country for a few years after graduation. Otherwise he is undecided as to which specific field he will go into.

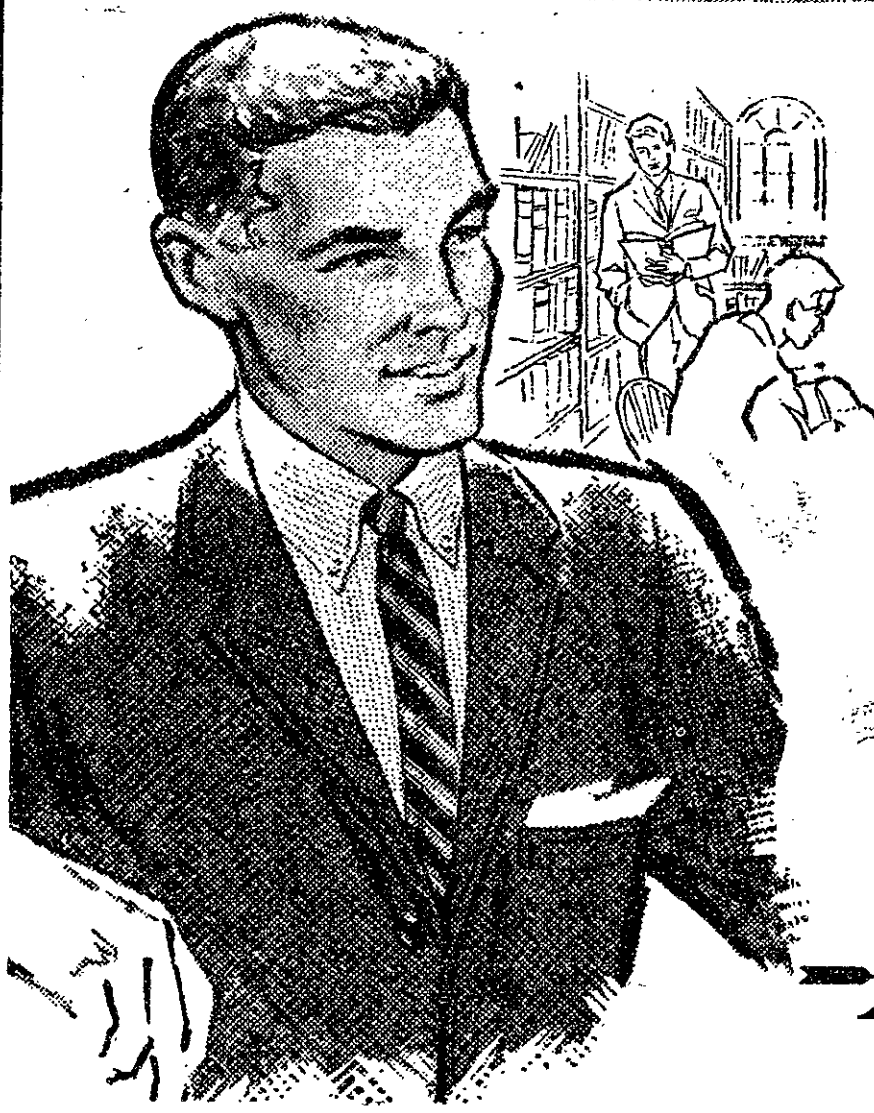
Luck or Circumstance?

What does an All-American think about being an All-American? Berghager expressed the opinion that much of the selection of the squad depends on luck or circumstance, and not real merit (he admits, of course, that it is certainly a wonderful honor). For instance, if a team has two or three equally fine players, the chance of any one of them being selected decreases. Also, it takes some maneuvering on the part of the coach to get votes for his players.

Played "Field Leader"

Dirk added that he was elected largely because of the role of "field leader" which Coach Batterman told him to play last year. Otherwise, he would not have scored as many points or played the ball as often as he did. He says in all sincerity that it would mean more to him, as far as soccer is concerned, to be on the championship team than to be elected All-American.

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Betas Dump DU, 20-6, For IM Football Championship

THE TECH

WEDNESDAY, OCT. 25, 1961

Page 15



Dick Picket '62, Beta quarterback, returns a pass interception as Don Alusic '64 tags him. Paul Olmstead '62 and Tony Weikel '63 (left) close in behind.

Woodrow Dailey '64, Beta defensive end, moves to cut off DU halfback Tim Vogt '62 as he sweeps the end. Pursuing Vogt is Charlie Fitzgerald '59; DU's Robin Lytle '62 and Jeff Paarz '63 (right) block. — photos by Richard Long '65

By Jay Salmon '63
Beta Theta Pi, intramural champions two years ago, defeated defending champion Delta Upsilon 20-6 Saturday in the A Division championship tilt. In the B Division, East Campus and Theta Delta Chi moved to the finals by defeating Student

House and Sigma Nu respectively.

Betas Score First

The DU-Beta game was a rugged, penalty-marred encounter which saw the Betas draw first blood late in the second period on a 50 yard pass from

Dick Picket '62 to Harold Branson '63.

Picket set up the drive by intercepting a DU pass on his own 30; two plays later he found Branson all alone behind the DU defense for the score. The point was good on a Picket to Warren Goodnow '59 toss.

Picket to Branson
In the third period the Betas tallied DU on downs and took over on their own 21. Five plays later Picket hit Branson on a four yard pass for the second touchdown.

Picket added the point on an off-tackle trap. The drive was

characterized by effective use of the Beta's main offensive weapons, the Picket to Goodnow pass combination and Picket's running on the trap behind effective blocking.

Bad Centering

Late in the third period the Betas added their last score. On a fourth and 40 situation the ball was snapped over the head of Tony Weikel '63, the DU punter, to fall dead on the DU six. On the first play the Betas got a bad snap as well and were set back to the 11, but on the next play Picket hit Branson for a third TD. The point attempt to Tom Gerrity '63 fell short, but the Betas had a commanding 20-0 lead.

DU did, however, have the satisfaction of being the only team to score on the Betas this season as, in the closing minutes, Tim Vogt '62 intercepted a Picket pass and returned it 60 yards for the score. The point was no good and Beta hung on for the 20-6 win.

Betas' Pass Defense Best

In the final analysis, better pass defense and a more consistent offense won for the Betas. DU was using a three or four man line most of the afternoon which put a hard rush on Picket and effectively contained the end sweeps, but the Betas repeatedly made good gains on trap plays and hit more consistently on their passes.

The Betas' two man line pretty well halted the DU running game and key interceptions by Picket and Dave Koch '62 kept the DU's from generating a serious offensive threat.

B Division

In the B Division, East Campus rolled over Student House 13-0 as they advanced to the finals on two touchdown passes from John Costello '62 to Bob Petrich '63. Theta Delta Chi became the other B Division finalist as they made a first quarter Bill Vaehon '64 to Tenny Chatwin '63 TD pass stand up for a 6-2 victory over Sigma Nu.

Next Sunday finds the B Division championship, East Campus vs. Theta Delta Chi at 3:30, and the consolation game, Student House vs. Sigma Nu at 1:30.

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Introduction To Sports

Golf

By Bud Pratt '64

The object of the game of golf is relatively straight-forward; it is a completely individualistic sport, with no call for outthrusting or outdistancing an opponent. He performs exactly the same ultimate tasks as yourself; to win, you must simply be a little more efficient about it.

Physical conditioning is seldom emphasized, the basic attributes being supple arms and wrists, some degree of directional orientation and depth perception, and (important) a compatible set of nerves. It is a game at which nearly anyone can acquire some degree of skill.

For each of the eighteen holes that constitute a "round" of golf, one may expect to execute three fundamental types of shots. The drive is the first, made with a thick "wood" club; the ball is mounted on a "tee" an inch or two above the ground (hence the expression "tee off"). When a golfer errs and drives the ball into the

woods he may become "teed off"). The chief aim of the drive is distance.

The second type of shot is made with a slanted, iron-faced bludgeon, designed to hit the ball where it lies, be it in tall grass, rocks, mud, sand, or smooth fairway. The object of this "iron" shot is to land the ball on the "green", that desir-

ON DECK

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Friday, October 27

Soccer (F) with Brown, Briggs Field, 3:00.

Saturday, October 28

Cross Country (V & F) at Coast Guard Academy.

Soccer at Springfield.

Wednesday, November 1

Soccer at Coast Guard Academy.

Soccer (F) with Exeter, Briggs Field, 3:00.

Saturday, November 4

Soccer with Army, Briggs Field, 2:00.

Cross Country (V & F) with Wesleyan.

able, carpetlike, segment of terrain that contains the golfer's ultimate goal, the "hole".

Once on the green the golfer uses a flat iron called a "putter" to gently stroke the ball into the hole. He must be very careful to gauge the distance of his putts, paying special heed to effects of surface curvature. This type of shot is the simplest, hence the most frustrating. It is considered a cardinal sin to "three-putt" a green.

By far the most difficult of the three varieties of shots is the iron. Unlike the drive or putt, the golfer does not hit the ball squarely, but uses the slant of his iron to "chip" or out the ball so as to impart a backspin that will enable him to control its distance. A good golfer takes all his iron shots with approximately the same strength, varying his distance according to how much of a "chip" he takes. The chip and the ratio of height to distance are increased as the ball is positioned closer to the rear foot.

Robson Finishes Third

Cross-Country Bows to NH

The MIT Varsity cross country team was beaten by the University of New Hampshire last Saturday at the Franklin Park course, 20-41. The winner of the race in an excellent time of 20:41 was Dave Langlois of UNH.

Mike Robson '64 ran very well for the MIT harriers, finishing third with a personal best of 21:04. He was running a strong second until seized with cramps in the last half mile and, as a result, lost one place to the second man of the UNH harriers.

Tom Goddard '63 of MIT finished fifth, also with his best time of the year, 21:34. The race was lost when UNH put four runners in ahead of MIT's next four runners—Roger Hinrichs, Capt. Steve Banks, Chuck Sigwart and John Dressler—who were running together most of the race.

Also running for MIT Saturday were Larry Feiner, Carl Dahl and Steve Colter. The next meet for the varsity will be against the Coast Guard Academy at New London, Conn. on Saturday, Oct. 28.

The first 10 finishers in the

UNH-MIT race were: 1, Langlois, UNH, 20:41; 2, Girouard, UNH, 20:53; 3, Robson, MIT, 21:04; 4, Wolfe, UNH, 21:14; 5, Goddard, MIT, 21:34; 6, Peort, UNH, 21:40; 7, Wassertarm, UNH, 21:48; 8, Allen, UNH, 21:48; 9, Leannard, UNH, 21:59; 10, Hinrichs, MIT, 22:03.

Frosh Also Lose

The MIT Freshman cross country squad also lost to a much stronger University of New Hampshire team 16-45. Running again without the services of John Golden, who although he is now out of the infirmary will not be able to run for a few weeks, the squad was not at full strength.

Coach Fannham feels that if Golden and Oliver, another man plagued with injuries, can get back into top shape for the Easterns and the New England, the MIT freshman team might do something in those two big meets. A good race was run by Roger Butler, although he was out-sprinted in the finish, to nail down fourth place with his best time of the season, 15:17.

Two other MIT boys in the top 10 were Dave Kuperstein and Bill Pruves. Also running good races were Mike Hester, Dick McMillan, Bob Thomas, Mike Efron, Frank Shaw and Ralph Helgeby. The freshmen will also meet the Coast Guard Academy next Saturday at New London.

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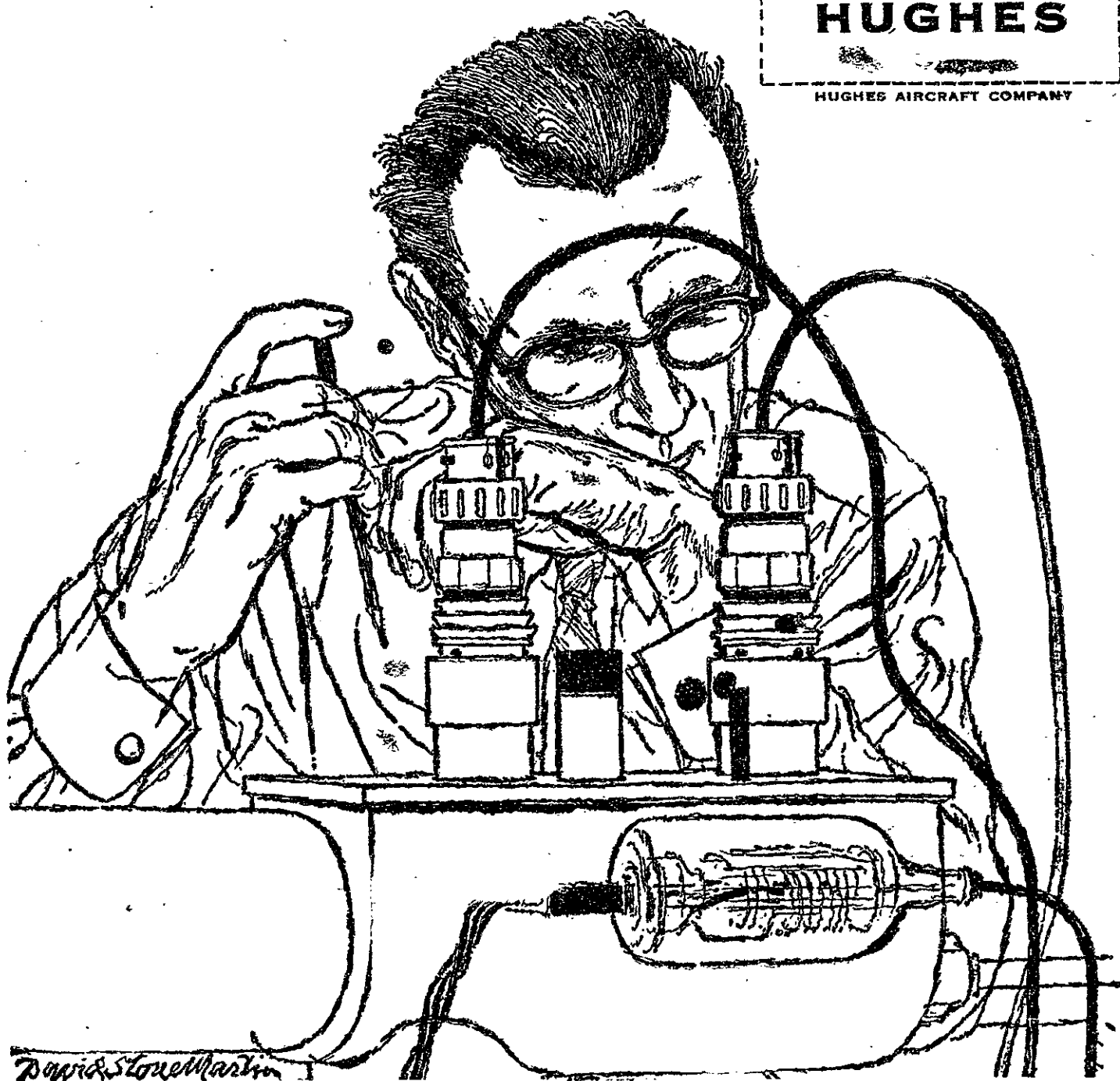
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